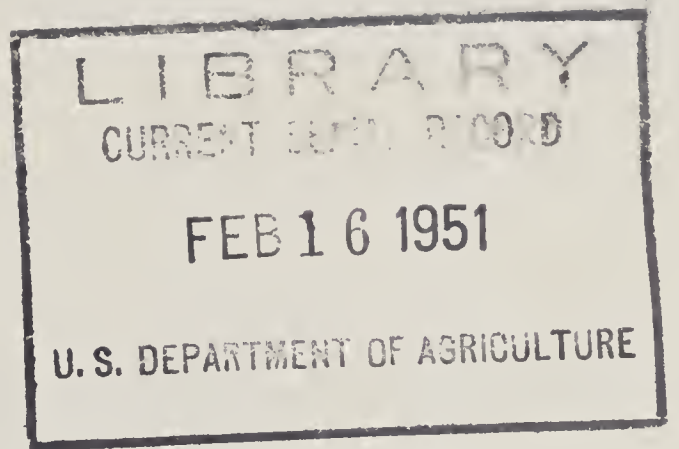


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*Report of*

**Cooperative  
Extension Work  
in Agriculture and  
Home Economics  
1950**

U. S. DEPARTMENT OF  
AGRICULTURE  
EXTENSION SERVICE



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# Report of Cooperative Extension Work in Agriculture and Home Economics, 1950

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UNITED STATES DEPARTMENT OF AGRICULTURE,  
EXTENSION SERVICE,

*Washington, D. C., October 16, 1950.*

HON. CHARLES F. BRANNAN,  
*Secretary of Agriculture.*

DEAR MR. BRANNAN: I submit herewith the Annual Report of the Extension Service for the fiscal year ended June 30, 1950. Totals for activities and results are for the calendar year 1949.

Yours sincerely,

M. L. WILSON, *Director.*

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## REACHING AND TEACHING 7,000,000 FAMILIES

The 12,000 extension workers throughout the Nation devoted their best efforts during the year to teaching nearly 7 million families how to make the most of their resources and achieve a better living. Seven out of every 10 of these families live on farms, and the cooperative Extension Service helped them learn to do a better job of farming and homemaking. Three out of every 10 of these families do not live on farms. They live in the open country, in villages, or in the city. The Extension Service helped these families to solve a wide variety of problems relating to agriculture and family living.

Carrying science to people so that they could put it to work on the farm and in the home was the main job of Extension during the year. By teaching men, women, and children how to use the findings of research, Extension helped them to do better in all kinds of farm, home, and community activities. In effect, Extension helped them to help themselves.

As a result, they raised bigger yields of crops and did it cheaper than with older methods. They produced more milk and meat and eggs per animal or bird, and their production was of higher quality. They made their land produce abundantly, yet they safeguarded the soil more efficiently than ever before. As good husbandmen, they used the year to make their farms more fertile, their homes more comfortable, and to prepare their children more adequately for future responsibilities of citizenship.

These accomplishments helped to make the Nation stronger and more resourceful—better equipped to meet its serious responsibilities in domestic and world affairs. Thus, 1950 found our storage bins well filled and our farms readier than ever before in history to provide the food, feed, and fiber needed in national mobilization for defense.



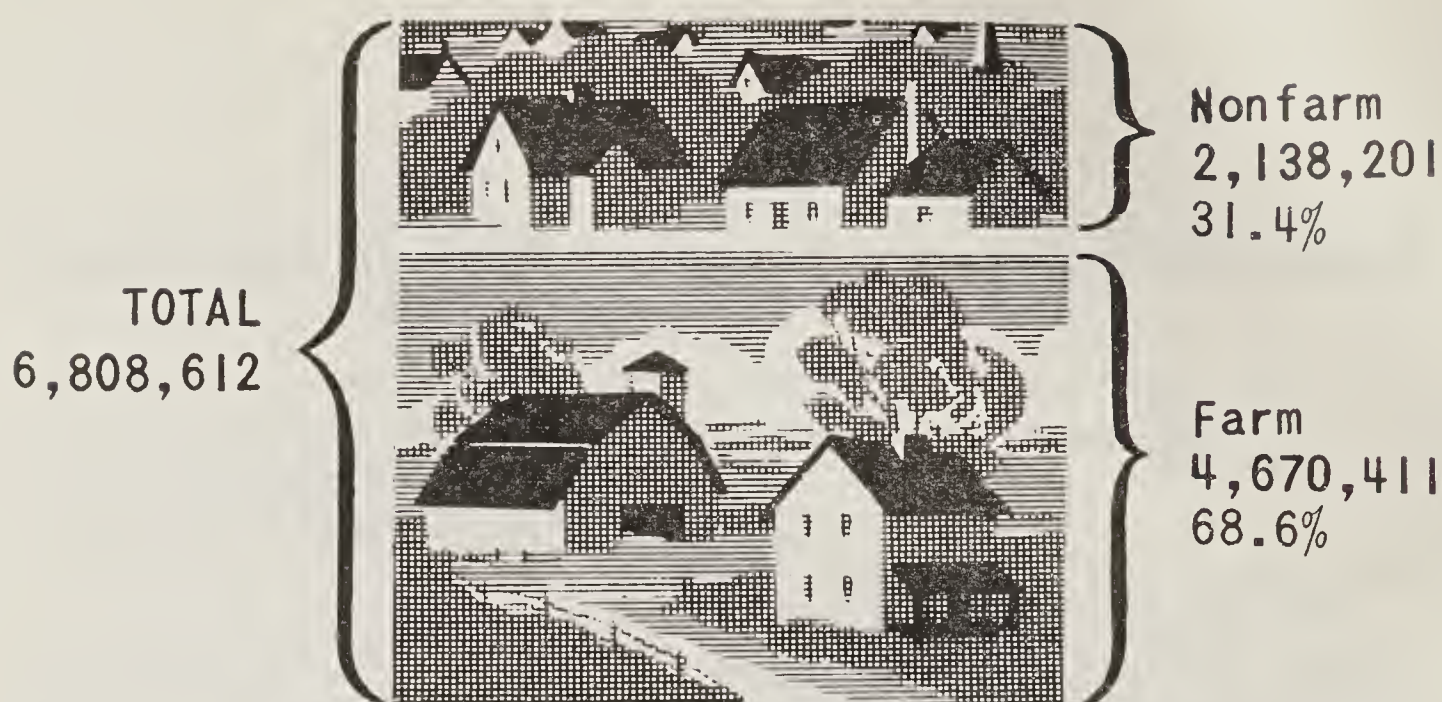


Figure 1.—Nearly 7 million families were influenced by extension work (1949).

Farm families had used their improved income of recent years wisely. They had plowed it down like a green-manure crop to build up the farm and the farm family. They had paid off mortgages and made sound savings. They had invested in new tractors, combines, electric milking machines, and all the other modern tools that make for efficient, fruitful agriculture. They had put funds and effort into terraces, diversion ditches, and other measures to build and save the soil. They had repaired, improved, and added to their barns, laying houses, and other farm buildings. They had mended, remodeled, and painted their homes, and installed more of the electric washing machines and other equipment that frees women of some of the drudgery of farm homemaking.

They were planting seed of improved varieties and using more fertilizer, insecticides, and fungicides. They were raising better livestock and poultry. They were making each pound of feed yield more meat, milk, or eggs, and each acre yield more wheat, corn, cotton, or pasture. Above all, they had increased their know-how. Probably the greatest change that has taken place in farming has been the development of farm people themselves. And farm people have made the other changes that have made American agriculture strong.

### Hitching the Laboratory to the Farm

In mechanizing, electrifying, fertilizing, building, remodeling, repairing, conserving, feeding, canning, planning, managing, and all the other tasks of farm and home, rural men, women, boys, and girls sought and received the educational help of the Extension Service during the year. The county agricultural agent, the county home demonstration agent, and the county 4-H Club agent worked day and night, and often Sundays and holidays, carrying to rural people the latest practical information from the laboratories and research projects of the United States Department of Agriculture and the State agricultural colleges and experiment stations.

This is an informal type of education—the greatest system of informal education in the world. It is a cooperative undertaking of the



Federal Government, the States, and the localities, and is so financed. It carries on in close cooperation with many Federal, State, and local organizations and agencies.

### 20,000,000 Personal Contacts

How did extension workers reach and teach 7 million families in 1950? By using all the means available to ingenuity and modern teaching and communication. They put into use the findings of extension studies, which indicate that the more contacts and types of contacts the extension worker has with a person, the greater the chance that the person will adopt a recommended practice. The 9,500 county extension agents and assistant agents in the 48 States, Alaska, Hawaii, and Puerto Rico made more than 20 million personal contacts with the people they were trying to help.

These extension workers made more than 8 million of these contacts when people came to see them in their offices. Nearly the same number were telephone calls. Farm and home visits by the agents are more time consuming than either office calls or telephone calls, but have the advantage of enabling the agent to help the farmer or homemaker right where this help is most needed—on the individual farm or in the individual home. Extension agents were able to make over 3½ million such visits during the year.

### 70,000,000 Attendance at 2,250,000 Meetings

There is not time enough during the year for an extension agent to reach all the people he needs to reach by calling at their farms, answering telephone inquiries, or letting them stop in at his office. So methods are used that reach many people at the same time. Meetings are an important means of doing this. During the year, the county extension agents and volunteer extension leaders held 2¼ million meetings, with a total attendance of over 70 million persons—an all-time high. Nearly one-third of these meetings, with nearly one-fifth of the attendance, were held by local leaders who had been trained by extension agents and specialists. Nearly half of the meetings that the extension agents held or took part in featured how-to-do-it demonstrations.



Figure 2.—Extension work led nearly 5 million families to improve their farming, gardening, and other agricultural practices (1949).



Both the number of these method-demonstration meetings and their attendance have been on the increase; during the year the meetings were nearly double the number held 20 years earlier, and attendance was more than double. The remainder of the meetings included tours, meetings for leader training, achievement days, encampments, and sessions featuring the results of recommended practices as carried on by rural people.

In addition to holding meetings themselves and encouraging volunteer extension leaders to hold them, the county agents used every possible opportunity to reach people at meetings held by other groups, such as farmers' associations, cooperatives, and service clubs. Cooperating with these groups, the agents took part during the year in more than 500,000 such meetings attended by nearly 30,000,000 persons.

### **Millions Reached Via Press, Radio, and Bulletins**

The usual means that reach people individually or in groups, were supplemented by a variety of methods geared to reaching even larger numbers. Extension agents cooperated with newspaper and farm-magazine editors in providing news articles and stories on agriculture and homemaking. During the year, nearly 900,000 such articles were published, carrying Extension's teachings to many millions of rural and urban people.

The use of newspaper and farm-magazine articles in doing extension work has been on the increase for a number of years, but the use of radio has been growing even faster. Extension agents broadcasted or prepared for broadcast more than 120,000 radio talks. This was an average of 1 broadcast a week for each county in which such broadcasting was done. In addition, extension workers pioneered in using television in their educational work. Daily and weekly newspapers and radio and television stations deserve much credit for their cooperation in making the latest farm and home information available to their vast audiences.

The agents distributed nearly 20 million copies of bulletins and leaflets issued by State agricultural extension services, State agricultural experiment stations, the United States Department of Agriculture, and other agencies. Often the publications were distributed in connection with office calls, farm and home visits, meetings, and other extension activities. The agents made considerable use of exhibits, circular letters, motion pictures, picture slides, slidefilms, posters, and other means of carrying information on better farm and home practices to large numbers of people.

### **Carrying Extension to Other Lands**

Extension work continued to play a prominent part in the policy of the United States in promoting cooperation, stimulating economic recovery, and encouraging democracy internationally. The President's Point 4 recommendations focused increased attention during the year on the need for agricultural education in many parts of the world. The population of most underdeveloped countries is largely rural, and their agricultural production could be greatly increased by use of



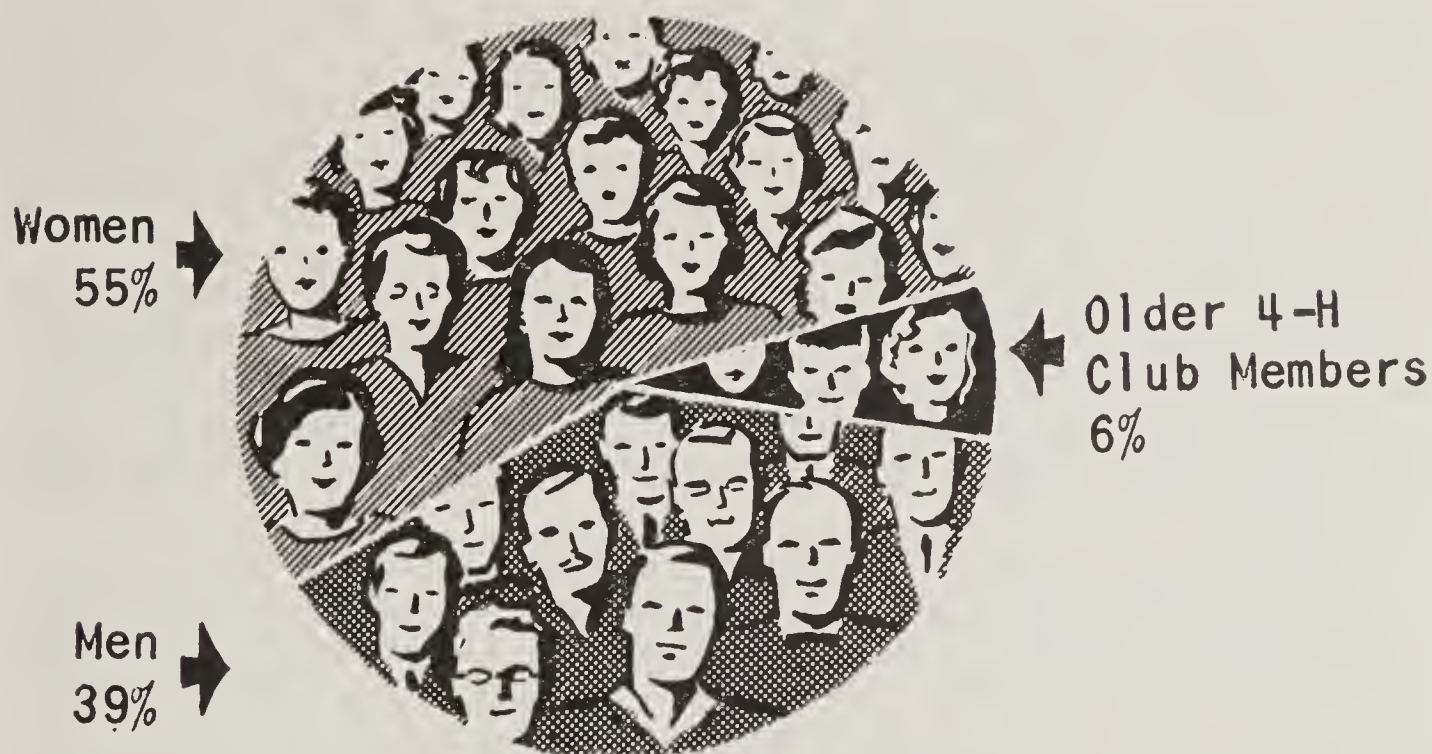


Figure 3.—More than a million persons gave their time as extension local leaders (1949).

knowledge that science has already made available. But the people have had no way of getting this knowledge and learning how to use it.

Even in nations well developed agriculturally, there was increased realization of the need for an effective system of rural extension education. The Food and Agriculture Organization of the United Nations took note of this at its fifth meeting in Washington in the fall of 1949. It recommended "That member governments strengthen, or where necessary create, officially sponsored and well-integrated services contributing to the advancement of agriculture, forestry, and fisheries, and of rural living, with particular emphasis on extension or advisory services." Extension workers, some of whom assisted in the conduct of this meeting, complied with the requests of those delegates to this 63-nation meeting who wished to hear about and observe extension work in this country.

Four hundred and eighty visitors came to the United States to learn, under Extension guidance, about American farming and extension education. While these visitors were here, extension workers explained their activities and purposes; let them use their offices as headquarters; took them to meetings, on tours, and to other extension events; arranged opportunities for them to get acquainted with American rural people; and made plans for many of them to stay on American farms.

Among these visitors were 120 workers in rural education from 28 countries in Europe, Asia, and Central and South America who came to the United States and observed Extension in operation in the Capital and in the States, counties, and communities. They considered how this extension system of education might be carried back to their homelands and adapted to the needs of their own rural people. In studying it, they gained a better understanding of how we have advanced from the days when a single farm worker produced enough to supply less than 5 people, to the present, when a single farm worker in the United States produces enough for himself and almost 14 others. Much of this work was carried on in cooperation with the United



States Department of State, the Economic Cooperation Administration, and the Department of the Army.

In addition to sending their representatives here, many countries asked that expert advice on extension operations be taken to them, and a number of Federal, State, and county extension workers went overseas to meet this need.

Extension arranged for a group of older 4-H Club members and former members to spend the summer living and working on European farms, and for a similar group from other countries to live and work on American farms. This project—the International Farm Youth Exchange—was carried on to promote international understanding and peace.

Information was carried to rural people about the United Nations, including the United Nations Educational, Scientific, and Cultural Organization and the Food and Agriculture Organization, as well as on other aspects of international affairs. Cooperating with UNESCO, Extension encouraged and facilitated the discussion by rural men, women, and youths of UNESCO's 1950 study topic, Food and People. It cooperated with other agencies in preparing an exhibit on extension education for showing at Munich and elsewhere in Germany.

### BETTER LIVING IN BETTER HOMES

Fundamentally, extension work is not carried on with soils, crops, livestock, poultry, trees, clothing, or food; it is carried on with people. The rural family is the main target of extension education. Extension's objective is to help the rural family get a vision of the possible improvements in rural living, and then to help them transform this vision into reality. Since the rural wife and mother is one of the well-springs of better family living, much of the emphasis of the Extension Service is put on educational work with women—home demonstration work.

During the year, Extension's 3,500 county home demonstration agents and assistants, aided by other extension employees and 450,000 women who served as volunteer local leaders, influenced well over 3,000,000 families to make improvements in their homemaking and family living. These home demonstration agents were located in nearly 2,500 counties throughout the 48 States, Alaska, Hawaii, and Puerto Rico. Because of lack of funds and, in some cases, the shortage of well-trained home economists, about 680 counties were still without a home demonstration agent. Some of these counties, however, had a limited home demonstration program carried on by the county agricultural agent, aided by State and district extension workers.

Volunteer leaders gave generously of their time, energy, and skill to forward home demonstration work. They attended training schools in the various phases of the program, teaching what they learned to members of their local groups. They carried on demonstrations in their own homes so that neighbors might see and want to do likewise. They multiplied the services of the home demonstration agent many times. They held more than 216,000 meetings at which the home demonstration agent was not present. These meetings were attended by over 4 million people. This was an increase of 27 percent over attendance at such meetings the year before. That these volunteer



local leaders continued to exercise initiative is well illustrated by the following example:

One of the extension clothing leaders in a small industrial city in Massachusetts knew many women and girls who did not know how to sew or had no sewing machine, yet needed to make their own clothes if they were to be suitably dressed. This leader decided to start a community sewing workshop. She found two unoccupied ground-floor rooms in a lumber supply office building. Her husband made a giant-sized work table. She and her son cleaned the place and reconditioned three old foot-treadle sewing machines. In less than a month, soon after she opened the workshop, 184 women came and spent from a few minutes to a whole day getting help on clothing problems. Women came to make coats, suits, pajamas, and dresses. The service was completely free; the leader did dressmaking to pay most of the costs.

County home demonstration agents helped in the organization and maintenance of 57,420 home demonstration clubs, with a membership of nearly 1,350,000 women. Through the club programs, these women participated regularly in extension home economics education. In addition, about 2 million women who did not belong to home demonstration clubs were reached and helped through such means as general meetings, special workshops, individual conferences, and bulletins. They were aided in improving their understanding and skill as homemakers and citizens. About two-thirds of the total of more than 3 million families that adopted better homemaking practices were farm families. The remaining one-third were nonfarm families living in the open country, in villages, or in cities.

During the year, most of the county home demonstration agent's time continued to be devoted to projects directly related to the improvement of home and family living. New homemakers, young mothers, and older women with new problems maintained a constant demand for basic information on such home economics subjects as foods and nutrition, clothing, child development, family relationships, home furnishings and equipment, home management, family financial planning, and housing. These subjects are the foundation upon which home demonstration work was built and upon which it continues to flourish. The home demonstration agent met these demands with the growing fund of research information in home economics. She also met the more recent demand from homemakers for educational help on health, recreation, buymanship, and community and civic affairs.



Figure 4.—More than 3 million families improved home practices as a result of extension work (1949).



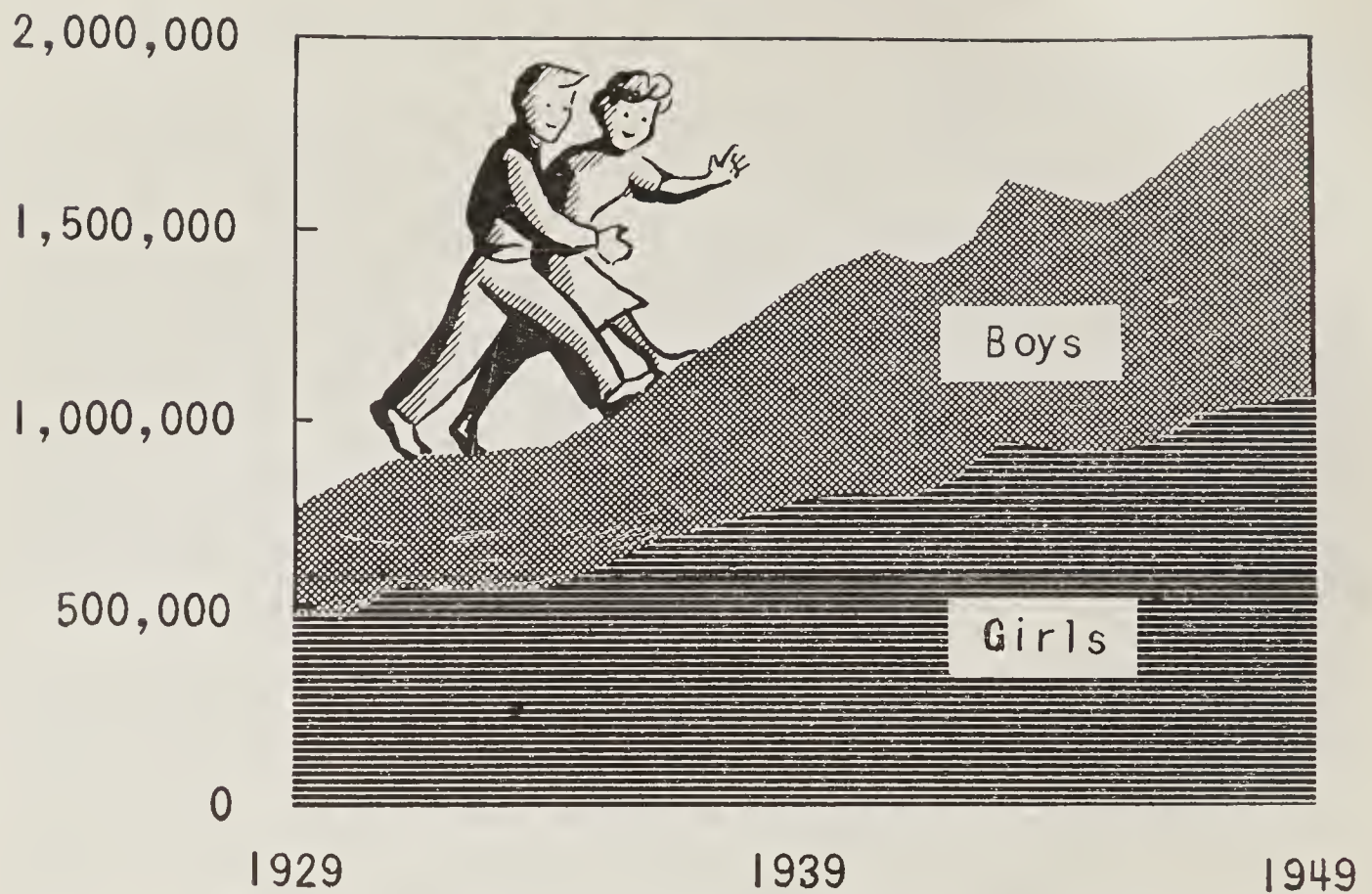


Figure 5.—Nearly 2 million boys and girls were 4-H Club members (1949).

#### 4-H CLUB WORK SETS NEW RECORDS

The year was the greatest in the history of extension work with boys and girls. In keeping with a steady increase over the years, the enrollment in 4-H Clubs totaled 1,886,214 boys and girls—the highest on record. This was an increase of nearly 57,000, or about 3 percent, over that of the previous year. The boys and girls came from approximately 1,400,000 homes. More than 75 percent of these were farm homes.

Nearly 78 percent of the boys and girls satisfactorily completed their project work for the year in agriculture or homemaking. This was 1 percent more than in 1948 and set another top record in 4-H Club work. Credit for this goes to the 251,550 volunteer local 4-H leaders, who were aware of the importance in the lives of young people of finishing tasks once they are started.

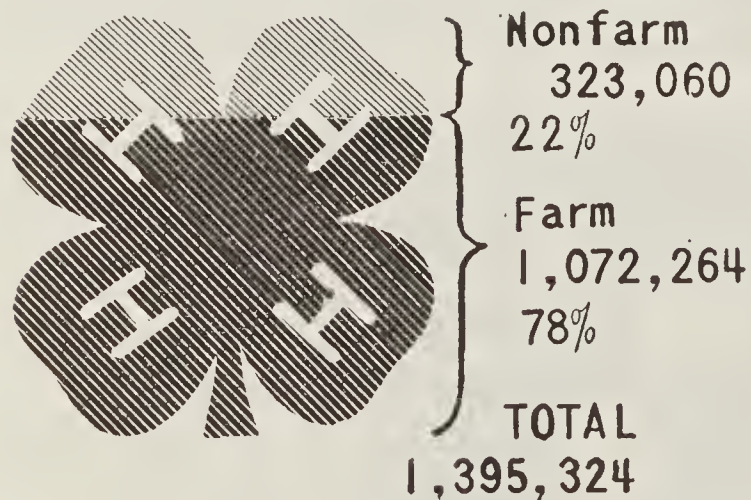


Figure 6.—Boys and girls in nearly a million and a half homes belonged to 4-H Clubs (1949).

During the year 662,399 boys and girls enrolled for the first time—another record high. This makes a total of more than 14 million persons, most of them now adults, who have participated in 4-H Club work and benefited from it.

*Farm management.*—The 4-H Club program emphasizes farming as a business as well as a way of life. There was an increase in the number of 4-H members managing their farm enterprises so as to receive the best possi-



ble income; understanding how to establish credit and the responsibilities involved; and keeping records that make for sound business practices. Older 4-H members were encouraged more than ever before to participate in various phases of farm and home planning programs; to learn about the place and functions of farm cooperatives; and to understand the importance of sound marketing practices in relation to the whole farm business.

*Farm engineering.*—Increased attention on the part of 4-H Club members was focused on the use of electric power and machinery on the farm for lighting buildings, pumping water, and operating home and farm labor-saving equipment. There was a considerable increase in the number of 4-H members enrolled in both the 4-H tractor-maintenance and the 4-H electric-demonstration projects as well as in those 4-H soil and water conservation projects involving terracing, drainage, and other practices requiring engineering skills.

The setting of new high records of achievement in 4-H Club work during the year reflected the special emphasis that the Extension Service has been placing for a number of years on providing better 4-H opportunities to a larger number of young people in both rural and urban areas. Through 4-H Club work, boys and girls between 10 and 21 years of age may enroll in clubs and join with other youngsters in educational programs of farming, homemaking, and community activity. The club programs operate under the guidance of county extension agents and the volunteer local leaders trained by them. The club elects its own officers and plans and conducts programs based on the needs and interests of the boys or girls. The members each carry on one or more learn-by-doing projects in agriculture or homemaking. They perform community services and enjoy group recreation. The program helps to enrich family life, increase farm income, improve standards of living, add to the satisfactions of community life, and, above all, prepare young people for their future responsibilities as adult citizens.

*Food production.*—4-H Club boys and girls produced more food than in any previous year. They raised more than a million acres of corn, peanuts, soybeans, potatoes, and other crops, including 85,000 acres of home gardens for the family food supply. They raised or kept nearly 9 million chickens, turkeys, and other fowls, and nearly a million animals, including dairy and beef cattle, sheep, swine, and rabbits. They kept 9,000 colonies of bees. In doing all this, they learned and carried out improved methods of cultivation, feeding, pest control, and other farming practices, and added to the family income and food supply.

*Food preservation.*—4-H members throughout the country helped to preserve the food produced at home for the family table. They canned, brined, cured, froze, or otherwise preserved 10½ million quarts of fruits, vegetables, and meats. They did this work in accordance with recommended practices, learned in 4-H Club work. Demonstrations by teams of 4-H girls gave impetus to the freezer storage of food.

*Home improvement and management.*—During each of the past 5 years, 4-H Club work in home improvement topped all previous records. During the year 4-H members improved more than 112,000 rooms in their homes, landscaped about 120,000 homes, and made considerably more than 500,000 articles that added comfort and attrac-



tiveness to their own homes and communities. They also became better skilled in home management. They took greater part in family planning and in sharing home responsibilities.

*Clothing.*—The enrollment of 610,000 4-H'ers in clothing work again surpassed that in any other project. 4-H members engaged in making clothing for themselves and for other members of their families. In all, they made or remodeled over 2 million garments, thus contributing much to the family savings and income. There was a considerable increase in the number of 4-H girls planning what they should make according to their inventory needs and the cash available. In this way, they learned to analyze their expenditures and buy more wisely. All these phases of the 4-H clothing program were high-lighted during county, State, and national 4-H dress reviews.

*Child care.*—More than 21,000 club members helped to take care of young children. They developed skills in the handling of little children; learned some of the fundamental principles of growth and development; and gained a greater appreciation of the importance of family life to the child. Many older 4-H girls earned money by caring for children in neighboring families during the absence of parents from the home. Special guidance in doing this was provided by county extension agents.

*Good citizenship.*—4-H Club members were also active in their communities. Nearly 60,000 older members served as volunteer local leaders for groups of younger members. Over 400,000 boys and girls demonstrated improved practices in farming and homemaking at meetings held for parents, neighbors, and others of the community. An equally large number learned to evaluate their own accomplishments through judging work at their club meetings and at various 4-H events, thus raising the quality of work throughout their own and surrounding communities.

Over a half-million members participated in conservation activities including those in wildlife, forestry, and preservation of soil and water. In all such activities as well as in others closely related to farming and homemaking, 4-H tours played a large part in attaining the objectives of the general 4-H programs under way. During 1949 over a half-million 4-H members attended 17,300 such tours.

Nearly 7,000 4-H camps provided boys and girls with still another means of gaining information and inspiration as well as developing attitudes that make for outstanding citizenship and for home and community improvement. These camps were attended by 290,000 members and leaders and were climaxed by the National 4-H Club Camp, held in Washington, D. C.

A 4-H citizenship ceremony, first developed at the National 4-H Club Camp, became an established feature in recognizing 4-H members, who, on their twenty-first birthday, became adult American citizens. The National 4-H Citizenship Pledge was used in every State in such ceremonies.

More than a half-million 4-H Club members learned ways of preventing fires and accidents. Over a quarter of a million assisted in the recreational activities of the community, often taking the leadership. An equally large number participated in music-appreciation activities.



Nearly 45,000 clubs engaged in community activities such as improving public grounds, conducting local fairs, building community playgrounds, and, in emergencies, helping others with their farm and home work.

Over 20,000 4-H achievement days were held with a total attendance of nearly 4 million members, leaders, parents, and friends of 4-H Club work. All these special meetings provided an opportunity to give deserved recognition to 4-H members for their community improvement activities as well as for project work well done. They did much to develop a feeling of success and self-confidence—essential to young people if they are to progress normally and happily and become an integrated part of the life of the community.

*Health.*—4-H members improved their own health and cooperated in improving health conditions in their homes and communities. Nearly 700,000 club members carried on special health activities. Nearly 275,000 had periodic health examinations. Even more received training in home nursing and first aid. Thousands of 4-H members checked and improved their own food and health habits. Thousands more studied their nutritional needs and those of other members of their families. They discussed at club meetings the factors making for good health conditions in their communities. They improved water supplies. They purchased equipment for local hospitals. They removed accident hazards from their homes, farms, and communities. They participated in campaigns for disease prevention, and performed many other services that created an awareness of health standards in local communities and led to an enthusiastic endeavor to improve them.

*Overseas friendship.*—Sharing with those in distress in other countries was again an important 4-H activity. It was recognized by 4-H Clubs everywhere that those who sent food, clothing, garden seeds, and farm and home equipment were at the same time planting the seeds of democracy, freedom, and peace.

Thousands of CARE packages were sent overseas by 4-H Clubs. They also sent thousands of gift boxes carefully packed by their members. 4-H Clubs in several States contributed to the support of certain families with whom they corresponded. In some States, special funds were raised for such purposes as supplying hand cultivators and sewing machines to 4-H Clubs in Europe.

*Democratic procedures.*—During the year, more older members took part in 4-H planning and leadership. At one State 4-H Club Week, for example, each of the 200 older 4-H members had an important part in the planning and conduct of the meeting. Where the older members are given such responsibilities, boys and girls seem to remain in 4-H work longer.

Since one of the objectives of the 4-H Club program is to help youth develop as good, forward-looking citizens, democratic procedures were encouraged whenever possible. In a large number of States, 4-H programs were increasingly planned by the members themselves with the guidance of their leaders. Regular business procedures were followed in all 4-H meetings. Members were taught to abide by the decision of the group and to accept responsibilities. In many States, the 4-H Clubs of each county organize a county 4-H federation or



council. During the year there was a substantial increase in the number of such councils. These councils assist in determining policies and in planning and carrying out county 4-H activities; in raising money for necessary expenses; and often in sponsoring 4-H officers' training schools.

### AN ENLARGED PROGRAM FOR YOUNG MEN AND WOMEN

More than 3,000 young men and women between 18 and 30 years of age live in the rural areas of the average agricultural county. They are in transition from youth to adulthood. They have many problems, but have been getting little help with them. They are too old for the organizations and activities for children. Yet they are usually too youthful to be interested in the organizations and programs of adults.

To help fill the gap, Extension workers enlarged their educational programs for young men and women. They made considerable progress in planning and conducting work with these young people. They reached and helped nearly 275,000 of them, an all-time high and an increase of more than 85 percent over the number aided in the

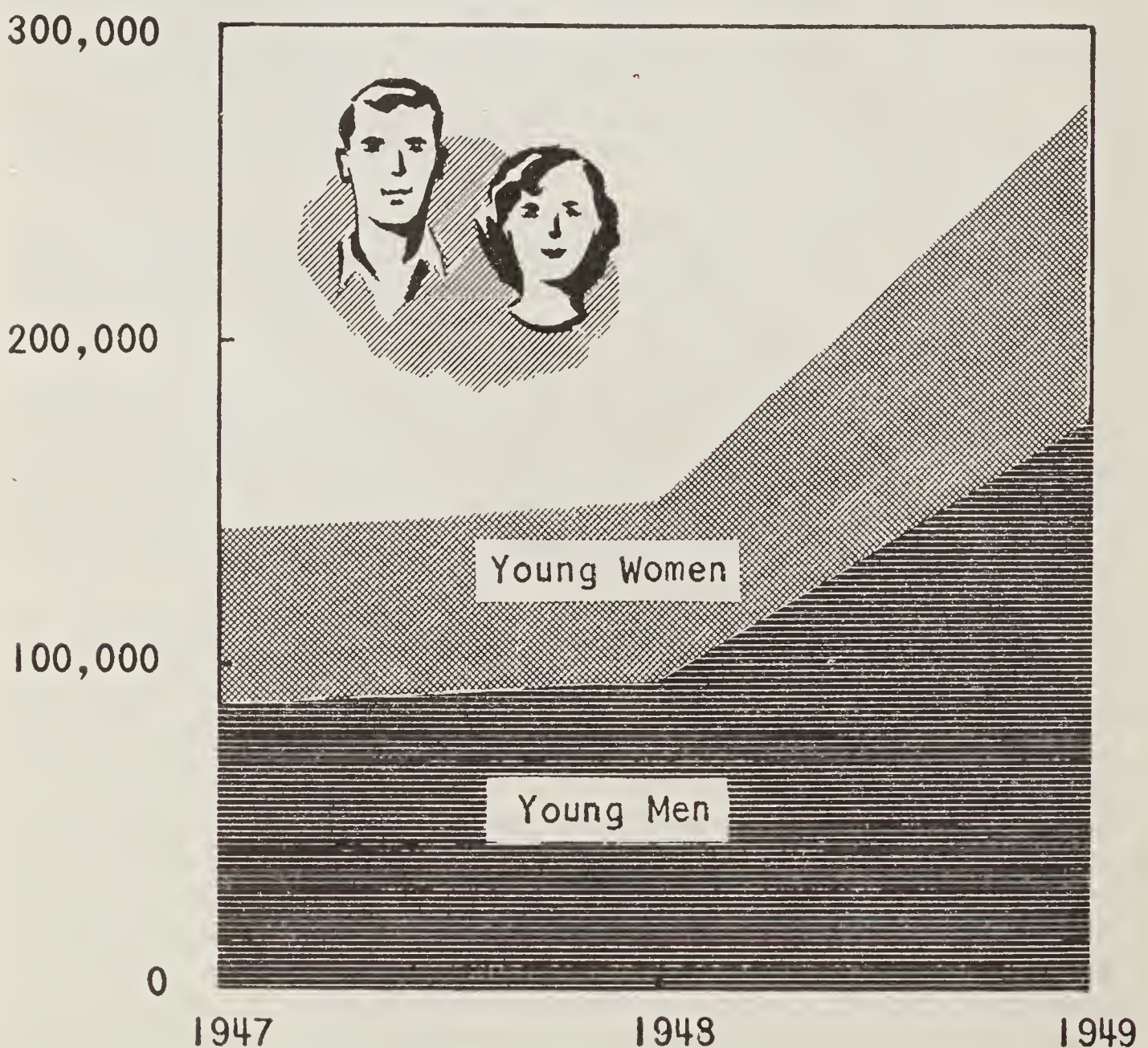


Figure 7.—Extension work with young men and women aided nearly 275,000 persons (1949).



previous year. Nearly 85,000 were members of the 1,800 young men's and women's groups especially organized by Extension. More than 115,000 were reached through other groups. Eighty-nine thousand more were aided individually by Extension. Extension workers conducted 18,000 special meetings for young men and women. The total attendance was nearly 570,000.

Newly organized programs for young homemakers resulted in a marked increase in the number of young women reached by home demonstration work. Extension workers in a number of States conducted special campaigns and leader-training programs for young men and women. These States included New Jersey, New York, Maryland, Pennsylvania, Illinois, Minnesota, Iowa, and Colorado. Interstate conferences of young men and women were held in Kansas and West Virginia. Two hundred and fifty young people and their leaders from Kentucky, Maryland, Pennsylvania, Virginia, and West Virginia attended the West Virginia conference. They received training in leading young people's groups. Program planning, discussion, recreation, and officers' duties were some of the topics covered in classes.

Discussions on current problems of local, national, and international importance continued to be a strong feature of local programs for organized groups. Problems of getting started in farming and home making and of farm and home planning were popular subjects. Recreation and social activities were important in extension work with young men and women. A considerable amount of assistance was given to young people through educational counseling and guidance.

In a number of Utah counties, citizenship recognition programs were held for young men and women who were eligible to vote for the first time. The purpose was to give these young people and other people a greater appreciation of democracy and the privilege of voting.

An extension rural-youth group in Minnesota produced a 2-hour talent show, raising \$350 to help improve hospital facilities in their county.

### **775 AGENTS WORK WITH NEGROES**

Among the 7 million families influenced by Extension's educational help during the year were about 425,000 Negro families who were reached by about 775 Negro county extension agents in 17 States, mostly in the South. About half of these agents were agricultural agents and about half, home demonstration agents. They specialized in working with Negro farmers, homemakers, and boys and girls. Nearly 325,000 of the families they aided were farm families, and about 100,000 were nonfarm families living in the country or in villages and cities. These were only the families aided through the work of the Negro extension agents; thousands of other Negro families were also helped, both in these 17 States and in other parts of the Nation.

Nearly 230,000 Negro farm families improved their farming practices as a result of the work done by Negro extension agents. About 170,000 farm families and 57,000 nonfarm families improved their homemaking practices. Three hundred and seventeen thousand boys and girls in 167,000 Negro farm families and 30,000 nonfarm families belonged to 4-H Clubs.



The Negro extension agents fixed their sights on helping the Negro rural family, rather than putting emphasis on mere crops and livestock. They gave increased attention to the general welfare of the family—to health, nutrition, recreation, and education. Largely as a result of their work during the past year and previous years, it was reported by a leading Negro extension worker that—

The Negro farm looks different from the way it used to, the farmer looks different, his home looks different, and his family eats differently. No longer can one travel along and successfully designate where Negroes live from where other farmers live. Houses of modern design and construction are being built, modern furniture and equipment installed. Electric lights and running water are rapidly increasing in the rural areas. The standard of living among Negro farmers has improved greatly. The morale has improved even more than the living standards. The Negro farmer has begun feeling he is somebody.

### **Negro Farmers Diversify**

With Extension's help, Negro farmers in the South became less cotton-conscious during the year, and more livestock-minded and pasture-wise. They helped to account for the marked trend in the South toward balanced farming or farm diversification. Growing some cotton is part of this balanced approach. But extension workers gave the Negro farmer educational help on preparing part of his land for pasture and sowing crimson clover, ladino clover, orchard grass, and fescue. They gave the farmers help and encouragement in grazing beef and dairy cattle and hogs on the pastures. The farmers were enthusiastic over their success.

How extension education helps Negro farmers to work out better balanced systems of farming can be seen in Tallapoosa County, Ala. Five years ago there were only six regular milk producers among the Negro farmers in this county. Not one of these six dairymen had a well-balanced feed and pasture program or a good breeding program.

Last year, 25 Negro farmers in this county sold grade B milk. Ten had developed well-balanced feed and pasture programs, and 9 were in an artificial-breeding program. Only two of these families bought as much as \$15 worth of feed, and several of them made a net profit averaging \$80 a month. A number of these families had a greater net income from milk than from cotton.

Negro extension workers gave farmers a great deal of educational aid in corn growing. They recommended ways of planting, spacing, fertilizing, choosing seed, and other key corn-growing practices. The farmers responded by increasing their yields of corn and raising their membership in 100-bushel corn clubs.

Aided by extension education, Negro rural families ate more adequate amounts of healthful foods during the year. A total of 136,000 families learned more about the kinds of food they needed for health. Nearly 115,000 homemakers learned to prepare nutritious, tasty, and economical dishes. Nearly 210,000 families improved their home food supply by following extension recommendations on the production of fruits, vegetables, meats, poultry, and eggs. Fifty thousand families received educational help with home butchering and meat cutting or curing, and 167,000 received training in canning, freezing, drying, and storing food. Nearly 70,000 families were aided in producing and preserving food according to a family food supply budget.



### **Homes Built, Remodeled, Improved**

Negro extension agents helped more than 6,000 families with recommendations on the construction of new homes, and more than twice that many who were remodeling their homes. More than 3,000 families were aided in the installation of water systems, and 1,700 families were aided in the installation of sewerage systems. Thirty-two thousand homemakers were given help in rearranging or improving their kitchens. Thirty thousand were given information and training in the repairing, remodeling, or refinishing of furniture or other home furnishings. Nearly 10,000 families were aided in obtaining electricity, and between 14,000 and 17,000 were aided in making good use of electricity on the farm or in the home. The Alabama, Georgia, and Texas Extension Services added Negro housing specialists to their staffs.

The experience of one Negro farm family that had lived in a dilapidated shack for 18 years shows how extension workers helped people to improve their housing. Members of this family went on an extension housing tour. The improvements they saw in other homes made them dissatisfied with their old place. After the tour, they asked the county farm and home demonstration agents to come out and help them plan the construction of a new home. The agents went, and they and the family sat down and discussed the home requirements in detail, even to closet space and wallpaper design. The agents supplied extension home-building plans and furniture-arrangement charts. Then the family hired a local carpenter, and 5 months later moved into a modern home.

### **Negro 4-H'ers Improve Family Living**

More than 75 percent of the 317,000 Negro 4-H Club boys and girls satisfactorily completed their project work in agriculture and homemaking. Not only did they learn improved methods of farming and homemaking, but they added to their families' food supply with the crops they grew, the animals and poultry they kept, and the fruits, vegetables, and meats they preserved. They raised 128,000 acres of corn, legumes, potatoes, cotton, tobacco, vegetables, and fruits, of which more than 25,000 acres were in home gardens. They raised or kept 83,000 dairy cattle, beef cattle, swine, rabbits, and other animals. They raised or kept 1,630,000 chickens, turkeys, and other birds, in accordance with extension recommendations. They canned more than 2 million quarts of food and froze 40,000 quarts and 40,000 pounds.

Negro 4-H Club members helped to make their homes more pleasant and more convenient. They improved 37,000 rooms and made nearly 210,000 articles for their homes. Between 30,000 and 40,000 of them improved the appearance of their homes by planting flowers, establishing lawns, or doing other landscaping work.

The 63,000 girls who completed their clothing project work for the year made 270,000 dresses, aprons, coats, and other garments and remodeled 120,000 garments for themselves and members of their families.



Negro 4-H Club members participated in a variety of activities leading to a better understanding of the responsibilities of citizenship. About 16,000 older members served as volunteer 4-H Club leaders. About 35,000 received training in leading recreation. About 20,000 carried on activities in soil and water conservation, and nearly 15,000 learned better forestry methods. About 24,000 received training in wildlife conservation. Sixty-two thousand had health examinations in connection with their 4-H Club work. More than 5,000 Negro 4-H Clubs carried on such community activities as improving school or church grounds or conducting a community fair.

The second annual regional camp for Negro 4-H Club members was held at the Tennessee Agricultural and Industrial State College, Nashville. Attended by 120 boy and girl delegates from 17 States, it was the high light of the year's camping activities of Negro 4-H Club members.

### AN ARMY OF VOLUNTEER LEADERS

Though unsparing of their time and effort in using all methods of carrying on their educational program, extension workers could not have helped 7 million families or served them so well had it not been for the army of volunteer, unpaid local leaders of extension work—farmers, rural women, and older boys and girls. More than a million of these public-spirited people gave freely of their time and ability so that their neighbors could have the advantages of extension programs. They studied at home, attended leader-training conferences, held local meetings and arranged other events, demonstrated improved practices, organized 4-H and homemaker's clubs, and carried on many other activities. On the average, each leader attended 3 of the nearly 140,000 training meetings held by county extension agents and State specialists. In turn, the leaders held more than 725,000 meetings with an attendance of nearly 13 million persons. About 55 percent of the leaders were women, 39 percent were men, and 6 percent were older 4-H Club boys and girls. Nearly half were active in home demonstration work. Nearly one-fourth were engaged in 4-H Club work.

One of the main problems of the county extension agent is getting qualified, community-minded men and women to serve as local leaders. Also, one of the main responsibilities of the agent is giving them the training and encouragement they need to do effective work. During the year, the agents gave considerable attention to this, and the number of local leaders increased by nearly 75,000. New leaders must be recruited every year, but many serve for 5, 10, and even 25 years. During the year, there was increased county and community interest in giving special recognition to these long-time leaders.

The cooperation of these local leaders was one of Extension's greatest assets. But in order to serve rural people effectively, extension workers cooperated with many other individuals as well as with agencies and organizations. As the educational branch of the United States Department of Agriculture, Extension worked with other agencies of the Federal Government and of the States and counties. Extension workers helped to explain Department of Agriculture programs to rural people and cooperated with other representatives of



the Department in holding meetings, demonstrations, field days, and various other activities. Close cooperation was also maintained with State, county, and local organizations and agencies active in fields relating to extension work. County extension agents devoted nearly 150,000 days' time to working with other agencies, and cooperated with them in more than 85,000 meetings.

### **CITY PEOPLE WERE SERVED, TOO**

In addition to helping people in rural areas, extension workers have always provided service to city people. This work was increased during the year, especially in the fields of consumer education, other matters affecting the home, and retailer education. The city homemaker as well as the country homemaker has problems of buying and preparing food, managing the household, and keeping the family properly clothed. The city boy or girl may be interested in growing vegetables or flowers, raising rabbits, or doing handicraft work. The city man may have "farm" problems in landscaping, gardening, lawn care, or pest control. Or, he may be the owner of a farm in another part of the State. As citizens and taxpayers, these people feel justified in expecting assistance from a public agency such as the Extension Service.

An increased demand on the part of urban people for extension assistance was evident during the year. This demand was expressed not only by individuals but by garden clubs, women's clubs, parent-teacher associations, chambers of commerce, labor organizations, hatcheries, manufacturers, and other organizations and firms.

During the year, extension workers answered thousands of requests from city people for information and help on many problems. In addition, they made progress in doing educational work with city people on a regular basis. In all 48 States, extension workers served people in urban areas. In 32 States, this service was provided as part of the regular extension program. In one or more counties of the other 16 States, in addition to the regular extension programs, programs were directed especially to urban people. Programs directed especially to urban people were carried on in 50 counties. In these counties, 32 home demonstration agents, six agricultural agents, and five 4-H Club agents were employed specially for the urban work. In about 80 percent of the counties having a village or city of 2,500 people or more, county extension agents conducted educational work in the villages or cities. Such work was done by agricultural agents in 1,473 counties, by home demonstration agents in 1,385 counties, and by 4-H agents in 503 counties (in States having 4-H Club agents).

Providence, R. I., provides a good example of the operation of a special urban extension program. Home demonstration work was started there in 1947. The Achievement Day program held in 1949 indicated the progress that had been made in 2 years. The city home demonstration council made all the arrangements, prepared an exhibit, arranged for exhibit booths, and planned the day's program. The exhibits showed dresses for mothers and daughters, clothing for men, young children, and boys, and principles of kitchen arrangement. The program included a skit on international relations. The number



of home demonstration groups in the city increased from 9 to 21 during the year.

Promoting urban understanding of farm people and their problems and promoting rural understanding of city people and their problems was one phase of urban extension work during the year. In one Indiana county, through the cooperation of the county agricultural agent, 50 businessmen spent a day working on farms, while the farmers ran the stores and other businesses in town. This project increased rural-urban good will.

### **“FOR . . . MY COMMUNITY”**

“For my club, my community, and my country” is the closing line of the national 4-H Club pledge. The emphasis given to the community is typical of the concern of extension education with helping to improve rural living in its various aspects. During the year, extension workers conducted special programs leading to community improvement; also, they combined approaches to community betterment in many of their regular programs.

Most of Extension's more than 140,000 4-H and home demonstration clubs undertook one or more community services during the year. The kind of service given varied from landscaping the town hall to helping maintain hot school lunches or making linens for the children's ward of a local hospital. In these and other community-service activities, extension workers gave counsel or information in the establishment of 2,300 community houses or meeting places, 1,100 permanent camps, and 523 community rest rooms. They helped more than 7,000 communities to have libraries, and assisted about the same number of communities with the improvement of school or other public grounds. Often communities are underorganized or overorganized, or lack coordination in the activities and programs of the various organized groups. Extension workers helped 56,000 communities with organizational problems, programs of activities, and programs for meetings.

In one county in North Carolina, the extension agents served in an advisory capacity in a county-wide community-development program centered about the slogan, Better Living for Rural People. People in 23 communities worked hard to make such improvements as repairing churches, developing recreation centers, and beautifying cemeteries. More than 5,500 of the county's people took part in tours in which the people of each community were hosts to the people of another community. Many improvements to farms and homes were stimulated by the program.

The home demonstration clubs in one Colorado county initiated a number of community improvements and got the help of other organizations in doing the work. They landscaped school grounds, developed a winter-recreation center, and established a recreation room for firemen.

Three home demonstration groups in Maine joined in helping to conduct a school-lunch program in Rockport. The groups supplied workers, canned goods, and money to help the program. Extension workers and officials of the State school-lunch program gave technical advice. As a result of the project, about 100 boys and girls from 6



to 18 years of age, and their teachers, had a hot, well-balanced meal each day.

## HIGHER YIELDS OF GRASS AND OTHER CROPS

Grassland farming has many advantages to the farmer and to the Nation. It is easy on the soil. It provides good, inexpensive feed for livestock. It enables the stock to do much of their own harvesting and to help keep the soil fertile. And, by promoting the raising of livestock, grassland farming helps to provide nutritious meat, milk, and eggs for city and country people alike. Because of the advantages of this livestock-conservation way of agriculture, extension workers did much to help farmers make it work on their lands. They promoted pasture, rangeland, and meadow improvement through management, fertilization, seeding with improved varieties, weed control, and related practices.

In emphasizing pasture improvement, extension workers had the aid of more than 60,000 volunteer local leaders. Together, they carried on educational activities that helped over 500,000 farmers in the use of fertilizers on their pastures. They helped nearly 400,000 farmers in similar use of lime, and nearly as many in obtaining improved varieties of pasture seed. They helped about 230,000 in the control of pasture weeds.

In this work, extension people were assisted by the enthusiasm and cooperation of farmers, State officials, and others. In Mississippi, Governor Fielding L. Wright proclaimed 1950 as Pasture Year for Mississippi. The State extension pasture specialist coined the slogan Make 1950 Pasture Year. A concerted educational program was mapped out and started.

The New England States cooperated in a Green-Pastures Program. The Missouri Extension Service promoted Grow-Grass Days. In Nebraska, extension workers carried on their program under the title, "Pasture—Forage—Livestock." These and similar campaigns in other States gave impetus to extension pasture-improvement work and resulted in record accomplishments in educating farmers to make the most of pastures.

In Tennessee, for example, a number of agencies, organizations, and firms cooperated with Extension in the Keep Tennessee Green program, which emphasized a seven-step program of farming practices. Extension workers and volunteer leaders held 92 county-wide meetings attended by 10,078 farmers; 1,569 community meetings with an attendance of 64,649; and 919 other meetings with an attendance of 14,267. They used many other means of reaching farm people in this program. A few of the results were, that over 200,000 acres were seeded to permanent pasture and over 50,000 acres to alfalfa, and nearly 195,000 acres were heavily seeded to small grain, crimson clover, and other crops for exclusive use as pasture.

### Higher Yields at Lower Cost

Generally favorable weather plus their progressiveness and increased know-how enabled farmers to produce bumper crops during the year on an acreage only 6 percent greater than before Pearl Harbor. Much of the credit for this abundant production goes to the farmer's desire



to get higher yields per acre at lower costs. During the year, Extension used all possible ways of reaching him with information to help him meet this goal.

Emphasis was given to using an integrated approach to crop production. Such an approach calls for combined use of all pertinent scientific knowledge rather than just one or several isolated practices. This approach continued to be signally successful in the South, where Extension has cooperated with other agencies and farmers in ushering in a new era in corn growing. Integrated recommendations for growing the most suitable hybrids, fertilizing the soil before and during crop growth, proper spacing of plants, shallow cultivation, and other science-based practices have upped yields to levels that would have been thought fantastic a few years ago. To popularize these recommendations, the Extension Service helped to initiate and carry on such features as interstate "corn-war" contests and 100-bushel corn clubs.

As a result of these endeavors, the 1949 corn yields in North Carolina averaged 12 bushels an acre greater than the 1938-47 average—an increase of 42 percent. Three hundred and ninety corn demonstrations carried on by Georgia farmers with assistance from extension workers had an average production of 115 bushels to the acre at a cost of 57 cents a bushel. In Mississippi, where the State average was 23 bushels to the acre, the 15,000 4-H Club boys and farmers who carried on corn demonstrations with the assistance of the Extension Service, got yields averaging 80 bushels to the acre. More than 600 of these yields were in excess of 100 bushels to the acre.

Extension workers carried on similar educational work in all parts of the country with outstanding results. Seventy-eight percent of the Nation's corn acreage was planted to hybrid varieties as compared with 68 percent in 1946. Extension workers, aided by nearly 54,000 voluntary leaders, helped from 100,000 to more than 825,000 farmers in using each of these practices in corn growing: Obtaining improved varieties of seed, using lime, using fertilizers, controlling plant diseases, controlling injurious insects, controlling weeds, and controlling rodents and other animals. Similar accomplishments were made in assisting farmers in the production of tobacco, potatoes, and wheat and other cereals.

### **Seven Steps to Success With Cotton**

In the South, extension workers continued to give educational stress to the Seven-Point Cotton Program—a program that has the backing not only of Extension, but of nine other agencies of the Department of Agriculture, the National Cotton Council of America, and 16 other national organizations. The program is a good example of a rounded, integrated approach to solving farm problems. The seven steps are: (1) Fit cotton into balanced farming; (2) take care of your soil; (3) get together on the best variety; (4) make your labor count; (5) control insects and diseases; (6) pick and gin for high grade; and (7) sell for grade, staple, and variety value. This program is an attack on major problems of 3 million families that grow cotton, and additional millions of people tied to a cotton economy. These problems relate to low-average farm income, mechanization and dis-



placement of workers, increased competition from rayon and other synthetic fibers, and even questions of international policy.

Extension workers encouraged the raising of one superior variety of cotton in a community instead of a multiplicity of varieties, many of them inferior in yield and quality. The extension one-variety educational program was conducted in 546 counties through 2,422 community associations, with a membership of 426,000 cotton producers. These associations were organized with the aid of the county agricultural agent to help farmers with all phases of cotton crop improvement, especially one-variety production. Members of such associations planted  $13\frac{1}{2}$  million acres of cotton that produced more than  $9\frac{1}{2}$  million bales.

As an example of the benefits of this program, farmers in one-variety associations in Georgia received premiums that brought them an average of \$12.50 more a bale or \$5.42 more an acre. They produced 28 pounds more lint to the acre and nearly 46 pounds more seed. Their increase in income as a result of following recommended practices amounted to more than \$12,500,000. Assuming that these results are representative for the cotton-producing States, the total increased income to United States farmers who took part in the one-variety program would be nearly \$200,000,000.

More than 24,000 voluntary local leaders aided extension workers in helping 335,000 cotton farmers in the use of fertilizer, 154,000 in controlling plant diseases, and 460,000 in controlling injurious insects.

Extension workers continued to carry on cotton work in grade improvement to increase the income of farmers through the adoption of improved harvesting, handling, and ginning practices. To encourage the marketing of high quality cotton, educational work was carried on with farmers on the better preparation of the crop for ginning. The results of this work were outstanding, especially in the face of many unfavorable production and harvesting situations. Only 2.6 percent of the crop was reduced in grade because of rough preparation, as compared with 3.1 percent in 1948 and 9.6 percent in 1946. This meant increased income to the farmers of \$8,500,000. In Arkansas, the amount of rough preparation was only 1.4 percent.

Extension workers helped more than 6,000 ginners in nearly 500 counties to select the proper equipment to turn out a high quality product and to operate their gins effectively. Typical of such work was the rapid dissemination of information on lint cleaners. In early 1949 research indicated premium returns from the lint cleaner of \$7.33 a bale. This information was immediately passed on to all ginners through extension channels and, as a result, nearly 200 gins were equipped with these machines before the start of the 1949 harvest season. The secretary of a cooperative association in Texas estimated that he received \$5 more a bale for his cotton than if it had been ginned in a plant without the cleaners, and that the whole membership of the association got \$70,000 in extra income.

### **Testing and Fertilizing the Soil**

In promoting higher yields of crops at lower costs, extension workers stressed using soil for cropping systems to which it is adapted, and fertilizing the soil so that it could produce well. They made soil-



testing services more available to farmers and helped farmers to interpret soil tests in terms of the treatment needed and how much fertilizer to apply per acre.

In Illinois, soil samples from 1,342,000 acres on 26,188 farms were tested. In one group of seven counties, a soil-testing laboratory was sponsored by five county agricultural agents with the cooperation of banks and county farm bureaus. In the first year and a half of its operation, the laboratory tested 8,227 soil samples for lime, 8,195 samples for phosphorus, and 7,975 samples for potash. These samples were from 1,037 farms in the seven-county area. In addition, samples were tested from a number of other counties in southern Illinois. The laboratory not only paid its own way, but made enough profit to pay off the \$1,910 advanced by the banks. But the bankers said they would like to leave the money in the hands of the laboratory for at least another year. If the laboratory continues to be successful, they want the money used for some other worth-while agricultural activity in the area.

## RESEARCH SPEEDED TO FRUIT AND VEGETABLE GROWERS

The problems of both commercial and home growers of fruits and vegetables continued to keep extension workers busy disseminating practical horticultural information during the year. The intensive nature of fruit and vegetable growing, its relatively high production costs, the perishability of the products, and the competitive market meant that commercial growers looked to Extension for the latest scientific information on producing high yields of quality crops at low costs per acre and per man.

Extension workers found themselves pressed to interpret a multitude of new research findings in terms of local needs and speed them to the growers. They concentrated on such matters as new varieties, new sprays and dusts, market needs, mechanical harvesting and grading methods, and growth regulating substances. In addition, they continued to give both commercial and home producers information on more standard recommended practices such as pruning and soil preparation.

State and county extension workers, together with volunteer local leaders, gave 243,695 growers of potatoes and other vegetables useful information on improved varieties. They gave information on the control of injurious insects to nearly 470,000 such growers, on the use of fertilizer to about 400,000, and on control of plant diseases to about 350,000. They also gave comparable information to thousands of fruit growers.

### Increased Interest in Small Fruits

Extension workers endeavored to meet the increased demand throughout the country for information and help on small fruit growing. In Pennsylvania, varietal demonstrations with strawberries were set up in 13 counties. Six blueberry demonstrations were started in five counties. Farm fruit-plot demonstrations numbering 41,263 were conducted in 228 Texas counties by county agricultural agents and home demonstration agents in connection with the home food supply program. In this program, 1,410,265 trees and 1,426,101



vines were planted. Fig cuttings numbering 66,232, grape cuttings numbering 251,413, and other cuttings numbering 76,528 were made as the result of demonstrations given in Texas counties. Agents reported that about 53 percent of the cuttings rooted and grew. The cutting demonstrations were done largely by home demonstration club women and 4-H Club members. 4-H Club members carried on 10,562 demonstrations in farm fruit work.

Forty-seven demonstrations in vegetable-variety strains were established in 18 Pennsylvania counties. Thirteen of these demonstrations in 10 counties were on the performance of 10 different varieties of sweet corn, and the others were on tomatoes, lettuce, carrots, peas, and spinach.

In an Arkansas community, 26 growers of canning tomatoes cooperated in conducting demonstrations using improved production practices. Yields were increased from less than 4 tons to the acre to an average of slightly more than 10 tons. Forty cases of canned tomatoes were obtained to the ton as compared with a district average of 27 cases to the ton. Furthermore, tomatoes in the can graded 60 percent extra standard as compared with less than 25 percent for the area as a whole.

In Louisiana an extension program was carried on to assist farmers in increasing and marketing seed and plants of new and improved varieties, especially those bred at the State experiment station. Assistance was given to seed and plant growers producing and marketing 431,200 pounds of improved seed, 25,695,000 plants and 20,800 bushels of seed sweetpotatoes and Easter-lily bulbs. The value of this work to the farmers is estimated at \$205,020. This value compares with \$37,649 for 1944 when the project was initiated.

### GROWING TREES AS A CROP

Sound management of woodlands helps to improve farm income and safeguard the Nation's resources, including soil and water. Extension workers made progress during the year in promoting such management. They stimulated the interest of farmers in growing trees as a crop and in fitting forestry work into sound farm management. They increased farmers' knowledge of why, how, and when to reestablish woodlands, how to care for growing forest crops, and how to harvest and market them for best present and future returns. They taught farmers how to get longer use of fence posts and timbers by treating the wood with chemical preservative.

Extension workers, with the cooperation of about 25,000 local leaders, gave nearly 75,000 farmers information and training in reforesting land by tree-planting—a substantial increase over the number aided in 1948. They helped more than 40,000 with the thinning, weeding, and pruning of forest trees, also a substantial increase.

More woodland owners were assisted with the marketing of farm timber. This help covered estimating, pricing, and selling procedures. Interest in the development of grasslands and livestock led to numerous requests for information and demonstrations on treating fence posts with preservatives. Assistance with the mechanization of farm logging operations helped to reduce costs.



Extension foresters demonstrated selective and improvement cuttings, weeding, pruning, and other forestry practices, and received a gratifying response. For example, a farm owner in Oklahoma planted 90 acres of black locust seedlings with the planting machine demonstrated by the extension foresters. The growing of this species for fence posts on wastelands or bottom land subject to overflow is good land use and fits in with the development of the livestock program. Tree-planting machines are now available in a large number of States, and have greatly increased the number of trees planted per man-day and have lowered the costs.

A number of local fire-protection groups were organized by county agents with the cooperation of State forestry departments. These are proving effective in reducing forest and farm fires.

Forestry education work with 4-H Club members reached a new high, with 27,000 carrying forestry projects, 148,000 receiving training in forestry, and 180,000 receiving training in wildlife conservation. A large part of the training in forestry and wildlife was received at 4-H Club camps.

Extension forestry work with adult farmers was carried on through individual and group assistance, such as farm visits, in-the-woods demonstrations of techniques, tours of forestry operations, and group discussions of problems through the press, radio, and other means.

### **Farmers Find That Forestry Pays**

Two examples will illustrate the profitable use that farmers made of forestry information received through extension agents. A North Carolina farmer, interested in selling some mature timber on his farm, consulted the county agent, who gave him information on estimating and helped him to scale his timber. The farmer became familiar with methods of scaling and decided that perhaps he could get an increase in the sale price of his timber by measuring and estimating it. He worked approximately 7 hours, and as a result received \$350 more than the highest offer that had been made. He commented that this was the first time he had made \$50 an hour for his work. Through assistance in marketing, many farmers are appreciating the value of their forest products and are becoming more interested in growing timber as a crop.

Extension workers gave farmers needed information on sawing building lumber from farm timber. A farmer in Indiana needed a general-purpose barn, 40 by 40 feet, requiring 12,000 board feet of lumber. He cut sawlogs from black oak, hickory, and beech in the farm woods, and had them sawed at the local mill for \$12 a thousand. Reducing costs, through the use of native timber, made it possible for this farmer, a veteran, to construct a new barn which he needed badly.

Forestry demonstrations such as these were effective in teaching farmers how to carry on better woodland-management practices. In Pennsylvania, more than 200 farmers have cooperated with Extension in setting up result demonstrations, and have developed and maintained these over a period of years. In the Prairie and Plains States, extension foresters have demonstrated windbreaks and shelterbelts. Farmers have learned the benefits that come from windbreak protection around the farmstead and from shelterbelts that have protected crops from blowing soil and drying winds.



Throughout the forestry program, special emphasis was placed on giving county agents forestry information through workshops and training schools. Increased cooperation of lumber and pulp industries in supplying personnel, equipment, and services contributed substantially to the program. The cooperation of State forestry departments and other agencies helped to make extension efforts more effective.

### **STOCKMEN GOT WELL-ROUNDED AID**

With an increased amount of valuable research information available, extension programs for livestock producers were expanded and improved during the year to carry the latest findings effectively to farm and ranch. Much progress was made in broadening these programs so that stockmen were given well-rounded educational aid that extended into such fields as soils and crops, farm management, insect pest control, and marketing. This development was facilitated by an increase in the number of extension livestock-marketing specialists under the Research and Marketing Act. Advances in extension livestock work were accompanied by increased producer interest.

Research has been providing practical ways of measuring the performance of meat animals. To help producers make use of these findings, the extension services of a number of States carried on pilot-plant projects. Special attention was given in this and related work to breeding animals that can make meat efficiently and bring premium prices on the market. With lard selling at 15 cents a pound and ham and pork loins at nearly four times that figure, swine producers showed increasing interest in methods for changing corn into a lean hog that does not have to compete so largely with vegetable oils and synthetic soaps. Available research results on the breeding and feeding of meat-type hogs was given wide distribution through shows, markets, field days, farm meetings, and all information media. Breeders, market men, processors, and locker-plant operators helped Extension with this.

The stockman's ability to stay in business and make a profit depends on the long-time productivity of his range. Recognizing this, extension workers emphasized educational work in range management. They helped in the organization of grazing associations and cooperated with such associations in advocating sound grazing practices.

### **Education in Disease Control**

Tuberculosis and brucellosis are serious problems to the livestock industry. During the year, extension workers carried on educational programs to help producers protect their animals from these and other diseases. This work supplemented the disease control and eradication programs carried on by the Federal Bureau of Animal Industry and the State governments. Producers were also assisted in controlling internal parasites of livestock and such pests as horn flies, lice, and cattle grubs.

Continued stress was placed on educational programs aimed at reducing shipping losses, such as those from dying and crippling of stock, and bruising of animals from rough treatment and improper handling.

During the year, extension workers and volunteer local leaders gave educational help to nearly 35,000 farmers in obtaining purebred bulls of the beef breeds. They gave comparable help to nearly 15,000 sheep breeders and nearly 40,000 swine breeders. They gave assistance with feeding problems to 225,000 cattlemen, nearly 51,000 sheep raisers, and nearly 500,000 swine raisers. They helped in the organization of 2,000 cattle-, 1,000 sheep-, and nearly 1,800 swine-breeding circles, clubs, or improvement associations.

### **Hogging Down Pays in the South**

Stimulated by extension programs, nearly 15,000 farmers in Alabama received an average of \$1 a bushel more for their corn by hogging it down instead of selling it on the grain market. This practice was part of an extension-recommended hog-production system that also included use of healthy stock of good type, best use of legume pasture, and feeding of protein and minerals.

As an outgrowth of the demonstrations in ewe culling and ram selection conducted during the year and previously by extension workers in Wyoming, it is estimated that a million head of sheep in that State produced an average of 1 to 2 more pounds of wool and 3 to 5 more pounds of lamb. This meant an increased return to producers of nearly \$1,500,000.

Extension workers in Utah continued to carry on their program in beef-bull grading, started 5 years ago. As a result of this work, the quality of the bulls used on the ranges was at least 20-percent better than it was 5 years earlier. Feeder cattle sired by the better bulls graded two grades higher and brought 2 to 5 cents more a pound.

### **DAIRY COWS GIVING MORE MILK**

The educational program in dairying is a good example of how extension education results in better farming, improved farm income, and plenty of quality food for consumers. Largely as a result of this work of taking science to the farm, the average dairy cow is now giving one-fifth more milk than 25 years ago. During the year, extension workers continued to carry on their long-time programs of helping dairymen breed better cattle and tend them better. In this work, they put special effort into keeping dairymen posted on the latest developments in breeding, feeding, milking, marketing, and pest and disease control.

Dairy herd-improvement associations, in which farmers join together in improving their stock and their husbandry, continued to be one of the important channels that extension workers helped develop to reach farmers with sound recommendations. At the end of the year, there were nearly 2,000 such associations with about 40,000 farmers as members and more than a million cows enrolled. This meant an increase during the year of about 10 percent in the number of members, about 12 percent in the number of herds, and about 15 percent in the number of cows—the largest increases on record.

The proving of bulls or determining their value as herd sires continued to be important. In cooperation with the State extension services, the Bureau of Dairy Industry proved 4,355 bulls on the basis



of records taken by the herd-improvement associations. The daughters of these bulls had an average production of 397 pounds of butterfat—another all-time high. Eight hundred and seventeen of the proved bulls were still alive, the highest number of living bulls ever proved in a year. This made it possible for the superior ones to be used to sire more calves.

### **Artificial Breeding Increases**

To help translate breeding know-how into action, extension workers assisted in the organization and operation of artificial breeding associations. These associations enable the inheritance of superior bulls to be extended to greatly increased numbers of cattle. At the end of the year, there were nearly 3 million cows in about 373,000 herds enrolled in nearly 1,500 such associations. This was an increase for the year of about 17 percent in the number of cows enrolled. Artificial breeding associations operated in 47 States and Alaska. As a result of this development, started and carried on largely with the educational help of the Extension Service, each of about 2,000 specially selected bulls will be artificially mated to about 1,300 cows in 1950.

In their contacts with dairymen, extension workers and nearly 74,000 volunteer local leaders encouraged the growing of better roughage. Much of the progress made in pasture improvement took place on dairy farms. The New England Green Pastures Contest is a good example.

### **Ensiling Grass Demonstrated**

The use of grass or hay silage gained in popularity, largely stimulated by demonstrations staged by the Extension Service. Making silage is a good way of saving the nutrients, especially when the crop is ready for harvest during rainy weather. Through improved pasture programs and better storage of forage crops, many dairymen produced from 70 to 75 percent of the nutrients required for their herds, as compared with about 50 percent on farms not having good forage programs. Nearly a half-million farmers were aided in improving their feeding practices.

Calfhood vaccination against brucellosis, with strain 19 vaccine, gained widely in use, and most States had definite plans for dairymen to adopt in their efforts to eradicate the disease. Much progress was made. Work toward controlling mastitis was also carried on in nearly every State by extension workers. Preventive methods were stressed and the proper use of the new biochemicals as cures was explained.

### **INCREASED PRODUCTION PER HEN**

With the educational aid of extension workers, poultry husbandry has come far since the days when the farm wife kept a few hens and let them peck about the barnyard. Even within the past 10 years progress has been remarkable. During the year poultrymen got 32 more eggs per hen than in 1940. Extension workers continued to give poultrymen information on the procedures that make such developments possible—streamlining and mechanization of poultry keeping, wiser feeding, breeding of better meat producers and egg layers, control of diseases and pests, and careful marketing.

Progress in cutting production costs was made on many farms where extension workers helped poultrymen to study their operations and put numerous mechanical devices into use. This work included rearrangement of nests, water fountains, and feed hoppers to save steps and shorten chore time. It included use of such labor-saving devices as automatic drinking fountains and mechanical feeders, bulk handling of feed, and improved nests and feed hoppers.

### **More Meat Per Pound of Feed**

Extension workers were quick to recommend farm application of modern nutrition discoveries, such as the use of B<sup>12</sup> and antibiotics. As a result, poultrymen got more rapid growth and an increased number of pounds of gain per bird for each pound of feed. Where formerly it took 4 pounds of feed to produce a pound of commercial broiler meat, many growers used only 3 pounds of the modern high energy feed.

Extension workers stimulated the use of new techniques of poultry-breed improvement. Largely as a result of such work, the rate of lay has shown a consistent increase throughout the United States. Extension workers cooperated in the National Poultry Improvement Plan, which is designed to improve poultry breeding and control disease.

Improvement of meat-type birds that gain weight faster for the grower and meet with increased demand from the consumer, was stimulated by Chicken-of-Tomorrow contests in 40 States. These contests helped to turn the spotlight on an improved and more efficient type of chicken for meat production. Extension workers carried on educational work in connection with these contests.

### **Reducing Market Losses**

When the average poultry raiser realizes that eggs will "wilt" just as lettuce or flowers do, then he appreciates the care that must be taken to keep them fresh. Too often deterioration takes place while the egg makes the trip from the nest to the consumer. To prevent this, extension workers carried on educational campaigns that led many poultrymen to use cooling rooms and follow other recommended practices.

Extension workers also promoted the use of better merchandising methods for turkey and chicken meat. A campaign entitled, "Enjoy Turkey Anytime," was carried out in California where cooperation was obtained from retail establishments, and turkeys and chickens were cut into small pieces and made available according to the consumer's wants. This helped to give an orderly flow of the product to the consumer, and take the turkey out of the classification of a special holiday meat.

Extension workers carried on educational work in poultry raising in about 41,000 communities, and were helped in doing this by about 53,000 volunteer local leaders. They helped nearly 41,000 farmers who belonged to poultry-breeding clubs, circles, or improvement associations, aiding in the organization of some of these clubs. They helped 31,000 farmers who did not belong to such clubs keep per-



formance records on their chickens and turkeys. They helped about 385,000 poultrymen with problems of disease and internal-parasite control and nearly 364,000 to control external parasites. They helped about 463,000 farmers with problems of poultry feeding.

### BATTLE AGAINST PESTS CONTINUES

Farming is a continuous battle against insects, plant and animal diseases, weeds, rats and other rodents. During the year, extension workers were alert to help farmers keep the offensive against them. The large crops and ample supplies of meat, milk, and eggs marketed were evidence of the widespread use of recommended practices of pest control. Such practices did not stop with harvesting, for the products of the farm had to be protected from insects and rodents through storage and market channels, until they were used. Nor did pest control stop here. People in all walks of life got help from extension workers in combating pests affecting people, livestock, flowers, shrubs, lawns, shade trees, buildings, furnishings, and clothing.

In the production of corn alone, extension workers gave educational help to about 108,000 farmers in the control of diseases, and to about 400,000 in the control of injurious insects. With the discovery of new herbicides, weed control work has received fresh emphasis, and extension workers helped more than 187,000 farmers control cornfield weeds. They helped about 170,000 farmers control rodents and other animal pests of corn.

In swine production, extension workers helped nearly 280,000 farmers to control external parasites, well over 330,000 to control diseases and internal parasites, and nearly 10,000 to control predatory animals.

### Insects on the Run

About 20,000 proprietary products for use in the control of insects and rodents have been registered for interstate sale. Many of these products include materials that are the latest discoveries of the research laboratory. Which one of these to use for which insect, on which host, in what strength, how toxic is it, what flavors does it add or destroy, how can the residues be removed, and what is the damage to man, animals, and equipment, are but samples of the questions that an increasing number of farm and city people continued to ask. Extension workers kept abreast of new developments and guided the public in the purchase and use of pesticides.

In 21 States extension workers helped about 35,000 farmers as part of the Federal-State grasshopper control program. The Extension Service was active in this campaign, especially in the crop-protection program which saved 7½ million acres of crops worth more than \$72,000,000.

Cotton-insect infestation was the worst in history, and hundreds of thousands of acres of the crop would have been a total loss had it not been for Extension's cotton-insect control program. In Mississippi, it is estimated that farmers who followed the extension cotton-poison program made \$10 for each \$1 spent on poisoning. Alabama farmers in 65 counties harvested 136,282 bales of cotton they would not have harvested without poison. These 80,775 farmers, aided



by Extension recommendations, treated 674,000 acres of cotton for the boll weevil and saved about \$23,560,000.

Extension workers in 33 States gave farmers educational help in the treatment of 20,386,666 cattle for grubs, flies, or lice. This resulted in an estimated saving of 76 million dollars. They helped in the treatment of 51,561,000 head of sheep, hogs, and poultry for ticks, lice, or mites. This resulted in savings of about \$17,323,000. They helped in fly-control spraying of stables and other premises on 1,180,282 farms.

The European corn borer destroyed corn worth about 350 million dollars. This loss would have been millions of dollars greater had it not been for the control programs carried on by Extension in 29 States.

The Extension Service made an intensive drive to protect the grain held in farm storages and local elevators from insect pests and rodents. Some corn that was not protected from pests, was damaged to the extent of 75 or 80 percent. In Kansas, the Extension Service cooperated with a number of organizations and firms in starting an intensive program to control weevil damage to stored wheat. In support of the program, the Extension Service used publications, radio programs, newspaper stories, and other means of getting information to farmers and people in the grain trade. Schools were held for county agricultural agents in preparation for a series of farm demonstrations throughout the State. Control of the weevil is one of the big problems facing American farmers and grain handlers.

### Combating Plant Diseases

Reduction of plant-disease losses through use of resistant varieties, disease-free seed, spraying, rotations, disinfection, and many other methods taught by Extension, resulted in increased yields of better products. The county agents in Kansas estimate that the value of all crops saved as a result of the extension plant disease control program in that State was nearly 45 million dollars.

A national plant disease warning service was conducted during the year by the Bureau of Plant Industry, Soils, and Agricultural Engineering, the United States Weather Bureau, the State extension services and experiment stations, and dealers in fungicides and equipment. A key plant pathologist was designated in each State to clear reports of certain important plant diseases between county agents and growers on the one hand and the national headquarters at Beltsville, Md., on the other. Radio messages, telegrams, circular letters, and news items were used to give farmers advance notice of threatening disease outbreaks and to advise them regarding control measures to take. For example, in the Maryland warning service, 14 circular letters covering certain diseases of tobacco, tomatoes, potatoes, lima beans, and vine crops were sent out to the counties from February 23 to September 7.

Extension workers taught farmers improved methods of seed treatment of cereal and other field crops and of vegetables. Largely as a result of this work in Nebraska, 90 to 100 commercial seed treating and cleaning units, including 15 portables, operated during the year, many of them for the first time. In Minnesota, it was estimated that



70 percent of the seed grain was treated in 1949 as compared with 64 percent in 1948. The number of seed treaters for custom work reached 238 in 60 counties.

Extension conducted fruit-spray services by radio in most of the important eastern fruit-growing States. Growers were sent timely information on when to spray for best results. In Massachusetts, the extension plant pathologist conducting the service sent out 28 spray messages and made 75 observation orchard visits and 75 follow-up visits. In Pennsylvania, where 11,097 apple growers received the spray service, it was estimated that \$4,360,000 was added to the value of the apple crop by spraying for disease control.

Demonstrations with new fungicides were conducted in most States to furnish local proof of their superiority over older ones. This was an important and necessary part of extension work with growers of fruit and other crops that have to be sprayed.

Soil treatment for control of soil-borne diseases is a relatively new line of extension work. Only recently, with the advent of better chemicals and new machinery, have large-scale soil treatments become practical. Extension workers demonstrated treatment of sugar beet and lettuce soils in Colorado.

Extension services in several of the States conducted schools to inform dealers handling fungicides, insecticides, and herbicides concerning the pests and chemicals recommended. In California, 14 spray dealers' meetings were held by extension specialists and agents. In West Virginia, dealers not only came together in schools but were informed by letter and sent leaflets and posters for distribution and display. Well-informed dealers who meet the public can be of great help in extending educational programs.

The diagnosis of crop sickness and failures continued to be an important phase of extension work. One State extension plant pathologist's office received as many as 6,000 inquiries and specimens for identification.

### **Eliminating Weeds**

Weeds steal water, light, and minerals needed by crop plants. They increase the farmer's labor and equipment costs, and lower the quality of his products. They harbor insect pests and plant diseases. Altogether, it is estimated, they cause a loss to American agriculture of more than 3 billion dollars a year. To help farmers reduce this loss, extension workers gave them guidance in weed control, especially in the use of the newer chemical weed killers, many of which have not yet been thoroughly tested. They gave farmers information on using these materials carefully so as to get rid of weeds without damaging valuable crops.

Extension workers helped 230,000 farmers with the control of pasture weeds. They helped almost 188,000 farmers with the control of weeds in corn, 85,000 with the control of weeds in wheat, and 132,000 with the control of weeds in other cereals. They also gave farmers educational assistance in controlling weeds in fields of legumes, cotton, tobacco, and potatoes.

The greatest progress in chemical weed control has been made with field crops and permanent pastures. However, chemical weed control is beginning to be extended to fruit and vegetable crops. Extension

workers guided farmers in such work. In Pennsylvania, for example, they conducted demonstrations with asparagus, peas, sweet corn, and other vegetables with promising results. In Maine, they conducted demonstrations on chemical weed control on blueberry acreage. Cooperating growers treated an additional acreage, mostly with 2,4-D.

### USING SOIL AND WATER WISELY

County extension agents did an increased amount of educational work during the year in soil and water conservation. So much progress had been made previously in the organization of soil conservation districts that this work had been largely completed. This resulted in less need for assistance from extension agents in organizational matters, and an increased demand for their help in the conservation education of farmers in the districts already well organized. County agricultural agents gave these farmers information on carrying out conservation practices and making related adjustments in their farming operations.

During the year, extension workers gave educational help on conservation to about 640,000 farmers living in soil conservation districts. They helped in arranging farm conservation plans for more than 112,000 farmers, and helped about 124,000 farmers do work based on such plans. The importance of such educational aid received increasing recognition during the year, as it became more generally realized that gains in soil conservation do not come from merely using a few individual practices, but from integrating such practices into the whole management and operation of the farm. Extension helped farmers to acquire the knowledge and skills leading to such integration.

An example of this general improvement in district educational programs and in the coordination of such programs with other district activities was evident in Montana. All the districts there devoted at least one meeting to the discussion of the educational program for the next year and prepared a written plan for it. This helped to make Extension's educational work on conservation an integrated part of each district's complete program of work. It helped extension agents to plan ahead to get this educational work done.

### 50,000 Helped With Irrigation

One of the many activities in which Extension cooperated during the year with the Soil Conservation Service was a jointly supported western educational and training project on irrigation. Six personnel-training schools were held for 470 extension workers, staff members of various other Federal and State agencies, sugar beet company representatives, and irrigation canal company executives. Forty-three irrigation schools were held for 3,381 farmers in four States. Fifteen demonstrations were held on farms and were attended by more than 1,800 farmers. In some of the demonstrations it was possible to run penetration tests and to show the proper head of water that could be used without erosion and the proper length of run. Altogether,



throughout the Nation, extension workers helped more than 50,000 farmers to solve irrigation problems.

Aided by almost 70,000 volunteer local leaders, extension workers helped nearly 800,000 farmers in the use of cover or green-manure crops. They gave about 630,000 farmers—more than ever before—practical information on problems of land use. They helped nearly as many in the use of crop rotations. They helped about 60,000 farmers apply the method of strip cropping to their fields, and helped about 120,000 in grassing waterways or otherwise controlling gullies or preventing their formation. They gave about 100,000 farmers practical information and advice on drainage.

### THE MACHINE AGE ON THE FARM

Increasing use of automobiles, trucks, tractors, combines, corn pickers, electric brooders, milking machines, and other labor-saving tools and equipment has been one of the main influences enabling farmers to produce so much and so well. Mechanization has been going on for many years, but since the Second World War at an increased rate. In 1948 and 1949 farmers bought more than 3 million dollars' worth of equipment. Part was to fill the gap caused by war and postwar scarcities. And part was for increased mechanization. Use of horses and mules continued to dwindle during the year. Yet, because of the high expense involved, farmers had to give careful thought to what mechanical equipment they should buy and how it would fit into their farming operations, and how to operate and maintain it properly.

Extension workers made a two-pronged educational attack on these problems. They helped farmers to figure out what equipment it would pay them to buy. And they taught farmers how to use the equipment and keep it running. More than 110,000 farmers were helped in the selection of mechanical equipment, and about 200,000 in making efficient use of such equipment. About 185,000 farmers followed Extension recommendations for equipment maintenance and repair. In the national 4-H tractor-maintenance program, over 38,000 4-H members and over 3,000 leaders were provided with training in the operation and care of farm tractors.

Extension workers conducted field meetings to demonstrate the efficient use of the machines that are revolutionizing the growing and harvesting of corn, small grains, rice, sugar beets, hay, silage, and cotton. Crowds of 10,000 to 40,000 were common at demonstrations of machinery for use in grassland farming—in preparing the soil, liming, fertilizing, seeding, fencing, and harvesting. In a number of States clinics and schools were conducted for combine operators, including many new operators. The importance of this work is indicated by the fact that proper adjustment and operation of the combine may save 5 bushels or more of grain to the acre. There are big problems in the mechanization of cotton farms, in forage harvesting, in fruit and vegetable harvesting, in insect and disease control, and in weed control. Extension workers demonstrated new equipment and practices for advancement in these fields.



### Engineering Problems Varied

Extension activity in agricultural engineering went far beyond the demonstration of new types of machinery. It included giving educational help to farmers on such matters as clearing brush from pastures; constructing terraces and grass waterways; building dams, ponds, and reservoirs; erecting and remodeling farm buildings; and using electricity.

Farmers called on the Extension Service for information and advice that would help them to keep their 20 billion dollars' worth of buildings, including homes, in repair and up to date. Extension responded by helping nearly 97,000 farmers with problems on the construction of new buildings, 98,000 with the remodeling of old buildings, and nearly 62,000 with the selection of equipment for buildings.

Special assistance was given to farmers in the planning and construction or remodeling of storages for large supplies of corn and small grain. The Extension Service cooperated with other agencies of the Department and with State agricultural experiment stations in making 26 plans available for such storage. Farmers were helped with agricultural-engineering problems involved in protecting grain from damage by rodents and insects. They were given assistance in artificial drying of wet and immature corn.

Dairy farmers were aided in remodeling barns for greater labor efficiency and to meet standards for the production of grade A milk, in remodeling and equipping milk houses, and in building milking parlors. They were helped in saving labor by using manure loaders, gutter cleaners, and water under pressure for barn cleaning. Comparable assistance was given to farmers in constructing and remodeling structures for beef cattle, sheep, poultry, and hogs.

### Building Plans Developed

Extension agricultural engineers in the Northeast cooperated with the Department Agricultural Research Administration in developing plans for farm buildings in this region. These plans were published by the Department. Such plans were also developed for the South and Midwest.

Extension agricultural engineers helped in the design of rooms for butchering; poultry dressing; vegetable processing, cooking, and canning; packaging foods for freezing; and meat curing. They supplied building plans for milk houses, milk-cooling tanks, home freezers, smokehouses, tobacco barns, sweetpotato storages, root cellars, and other structures and equipment. They helped to plan kitchens for community, school, church, and camp buildings, and assisted in the design of abbatoirs and freezer-locker plants.

### ELECTRICITY LESSENS TOIL

Increasing use of electricity has played an important role in the mechanization of both farm and rural home. It has helped families to lessen the physical toil of farming, produce more efficiently and cheaply, cut down on the amount of burdensome household work, and enjoy rural living more. Extension efforts in this field were directed at helping rural families to get electric service, to wire homes and farm buildings so that they can get a good flow of current, and to choose



and use suitable electric lights and mechanical equipment for the farm and home.

The more farm families who have electricity, the fewer need help in getting it. Consequently, the number of families helped by Extension in obtaining electric service declined during the year. Such assistance was given to about 118,000 families. With electric current running to 80 or 85 percent of the Nation's farms at the end of the year, there was a marked increase in the number of families given educational aid in the selection or use of electric lights and home electrical equipment. Extension workers and volunteer local leaders gave such help to nearly 300,000 families. Counsel in using electricity in farm operations was given to a record number of 87,000 families. Even farm families who have had electricity for 10 to 15 years still were making inadequate use of it and needed information on how it could save labor and help them produce a better product for market or home use.

### **Wiring Often Inadequate**

Many farms that were wired several years ago have inadequate wiring, and thus are unable to make full use of labor-saving equipment. Extension workers gave many families assistance with necessary re-wiring, and emphasized the importance of proper wiring in their contacts with families who were preparing for electric service.

In Mississippi, 2,228 homes were wired in accordance with Extension recommendations. More than 3,000 people attended 150 Extension-sponsored lighting demonstrations, and nearly 600 of them bought or rearranged lamps for better lighting. Nearly 3,800 people throughout the State attended 382 demonstrations. As a result of 33 extension demonstrations, more than 5,000 cords and pieces of small electrical equipment were properly repaired.

Extension workers were besieged with requests for information on water-system installations, grain and hay drying, feed grinding, electric terminology, kilowatt-hour consumption, wiring, care of equipment, and other aspects of rural electrification. Much of Extension's rural-electrification work was done in cooperation with the Rural Electrification Administration, REA cooperatives, and the rural service advisers of power companies.

Following enactment of legislation authorizing the Federal rural telephone loan program, extension workers cooperated with the REA in informing rural people about the program and how they might be able to make use of it.

### **MANAGING THE FARM FOR PROFIT**

Farmers received lower prices for their products during the year, but had to continue to pay high for hired help, equipment, and supplies. To help them through this "squeeze," extension workers spent considerable time on education in farm management as well as other matters that gave promise of lowering production costs.

By practical application of Extension recommendations in farm management plus good production practices, farmers in every State improved their farming operations, enlarged their businesses, and increased their income. Extension workers in Illinois, Iowa, Kansas, Kentucky, Missouri, North Carolina, and other States helped groups

of farmers to make full application of the results of research and new technologies to their individual farms.

During the year, extension workers helped nearly 30,000 farmers by taking business-survey records of their farms, and helped nearly 35,000 by taking similar records on individual farming enterprises. They helped nearly 33,000 by taking other survey records of their farming situations and operations. These surveys were of value, not only to the farmers who furnished the records but to many more who were aided by educational material based on the records. About 88,000 farmers were helped in keeping farm-inventory records, nearly 200,000 in keeping general farm records, and about 88,000 in keeping records on specific enterprises.

A total of more than 175,000 farmers were aided in developing supplemental sources of income, 173,000 in solving problems involving the use of labor, and nearly 145,000 in preparing a farm-income statement for tax reporting. Assistance in developing a farm plan was given to nearly 115,000 families, and in developing a farm and home plan, to more than 55,000.

### PLANNING MEANS LOOKING AHEAD

The farmer is a businessman. How his family profits from their husbandry depends to a considerable extent on how he manages the business side of farming. Here economic facts and their interpretation enter in. The farmer must know these facts and apply them to his operations, particularly his planning. Recognizing this, extension workers, aided by 34,000 volunteer local leaders, carried economic outlook information to nearly 475,000 farmers in 30,000 communities in 2,200 counties.

Much of the intensive outlook work was concentrated in the winter so that farmers would know the supply situation, market outlook, and other business facts on which to base their operations during the ensuing crop season. But situations change from day to day and month to month. So extension workers channeled a steady flow of up-to-date economic information to farmers and ranchers throughout the year.

The Federal Extension Service, with the cooperation of the Bureau of Agricultural Economics and the Bureau of Human Nutrition and Home Economics, held the twenty-seventh annual agricultural outlook conference, in Washington, D. C., in the fall. Nearly 150 State and Territorial extension workers, mostly extension economists and home-management specialists attended. They studied all aspects of the outlook for both agriculture and homemaking in 1950. As they returned to their home States, extension education on the outlook began, with the information fanning out from them to other State extension workers, to county extension agents, to volunteer local leaders, and to farm families.

### FARMERS HELPED WITH CREDIT PROBLEMS

Extension workers gave 56,000 farmers in 2,000 counties information to help them solve credit problems. This information was on such subjects as land values, financing farm and home improvements, and the availability and terms of loans.



A number of States held farm-credit conferences, at which representatives of lending agencies were given the most important agricultural developments affecting credit, and the loan terms. Farm-hand appraisal clinics were held with the cooperation of appraisers from the Farm Credit Administration and other lenders.

Extension gave marked attention to the financial problems of beginner farmers. Much of the financial education done by extension workers was associated with activities in connection with father-and-son agreements, leasing, steps in buying a farm, and passing property to the next generation.

### MARKETING EDUCATION EXPANDS

Expedited by the Research and Marketing Act, educational work in marketing continued to expand during the year. In this work it was recognized that a prosperous agriculture is not possible without ready movement of farm products to profitable markets.

Extension, by educational means, promoted greater efficiency in the handling and merchandising of farm products. In doing this it placed more emphasis upon its work with processors, wholesalers, retailers, and consumers. Success in the marketing of farm products depends as much upon well-qualified and well-informed distributors and handlers as upon the skill of the producer himself. Those who handle the farmer's products have much to do with their acceptance by consumers and with the costs of doing the job. Thus handlers exert a strong influence on the farmer's income and on his marketing practices.

The work in marketing dealt with better grading and packing, improved handling and merchandising, better marketing organization and facilities, maintenance of quality, reduced wastes and costs of marketing, improved trade relations, better use of market news and inspection, profitable use of low grade and surplus products, education and training of retail personnel, and consumer education. Producers and distributors had a hand in selecting and planning this work.

During the year, extension workers gave educational assistance in 1,706 counties to about 14,000 marketing and distributing agencies and trade groups. They conducted 3,645 programs in 789 counties relating to the specific use of marketing information. They conducted or took part in 3,052 programs in 1,132 counties pertaining to the improvement of marketing facilities. They made or assisted with 1,738 marketing surveys. In this and other marketing work, they helped an estimated 10,000 cooperatives, plus 1 to 2 million farm families who did not belong to these cooperatives, in the purchasing of farm and home supplies and equipment and in the marketing of cotton, livestock and poultry products, fruits, vegetables, forest products, grain, hay, home and craft products, tobacco, sugar, rice, and other commodities.

### Helping Both Producers and Users

Much of the educational work in marketing helped farmers to get prices that were in line with the market quality and condition of the product, and helped users to get products of the grade or kind suited



to their needs. Many State programs for marketing fruits, vegetables, eggs, cream, livestock, and wool helped to prevent high quality products from selling for too little, and those of low quality selling for too much. One-variety cotton communities are developing markets in which their improved cotton is identified and sold on a quality basis. Hogs with higher percentages of lean are bringing premium prices, now that lard has become a less important source of fat. Wool is being core-sampled and sold on a clean graded basis. Vegetables for processing are sold on grade specifications and inspection. Extension continued to work with producers and distributors to encourage these improved marketing practices.

An example of the value of such marketing work can be seen in Mississippi, where Extension carried on a project during the year designed to encourage farmers to carry more of their cattle through the winter on good pasture and sell them on a better market at heavier weights. This project was carried on under the Research and Marketing Act. It was intended to change the situation under which Mississippi livestock farmers usually sell 66 percent of their cattle from July to November, when the price is seasonally low. As a result of the Extension educational program, 10 times as many cattle were sold in March, April, and May of 1950 as in the same period of 1949. A shift in the time of marketing of 10 percent of the State's 1,500,000 head of cattle from the fall to the spring would result in a more stable supply of higher quality beef for consumers, and an increase in profits to producers of more than 6 million dollars.

### **Cooperative Marketing**

Cooperative organizations are important factors in the marketing of many farm products and in the purchasing of supplies. Extension continued to carry on much educational work with these organizations. Meetings were held for the discussion of marketing. Individual cooperatives were helped educationally in the improvement of facilities, business methods, membership relations, operation, and other problems. Extension workers gave help in such matters to more than 1,600 general marketing cooperatives with well over 400,000 members. In addition, extension workers helped educationally in the organization of 156 new general marketing cooperatives.

They aided 2,097 dairy cooperatives, with a membership of 486,696; 1,426 cooperatives for the purchase of farm and home supplies and equipment, with a membership of 324,472; 1,510 livestock and wool cooperatives, with a membership of 285,244; and 857 grain and hay cooperatives, with a membership of 215,062. They also aided cooperatives that handled poultry, eggs, fruits, vegetables, cotton, and other products.

### **Educational Help for Retailers**

In many States, extension workers helped retailers to improve the merchandising and handling of selected foods. In some States they conducted broad training and information programs for retail personnel. Emphasis at the outset was on fresh fruits and vegetables, and expansion was taking place to include poultry products and meats. Wisconsin and Indiana used highway trailers to take the



class work and demonstrations to food retailers. Consumer clinics were held to supplement the classes, and these were followed by personal consultations and demonstrations in the stores of the trainees. Information and merchandising aids were sent to retailers periodically. Retailers who participated in such training are employing more care and merchandising skill, thus reducing wastes and losses, moving more produce, and bringing more satisfactory food products to consumers.

The work done by the Indiana Extension Service with the "school on wheels" was representative of developments made during the year in educational work with retailers and wholesalers. The school is an especially engineered trailer unit. The equipment includes a 23-foot display case, special display stands, prepackaging materials, and other teaching aids. Actual produce was used in the "learn by doing" instruction. The trailer was usually parked near a wholesale supply house for use in a well-integrated, 8-hour course of instruction.

Outstanding educational work with fruit and vegetable retailers was also conducted in Hawaii, Florida, Connecticut, New Jersey, Rhode Island, Maryland, Wisconsin, and in other States. Similar work was done with retailers of poultry and eggs in about 30 States.

### Consumer Education

Work in consumer education centered about foods because food is of major concern to all people and many marketing problems result from the perishable nature of food. The work was primarily for consumers, but the related problems of handlers and producers received emphasis also. Consumer needs and preferences were interpreted to handlers and producers, and likewise the handlers' and producers' problems were brought to the attention of consumers. Regional, State, and city projects were carried on.

Information was assembled, interpreted, and disseminated on food supplies, prices, qualities, sources, marketing seasons, varieties, selection, and uses. Releases adapted especially to consumers were sent to many people who work with consumers. They reported research results, listed good food buys, and called attention to plentiful foods. The program also included market tours, food-marketing talks, demonstrations, radio and television programs, and press and magazine stories on food marketing. Extension cooperated with other agencies in these programs. During the year extension workers conducted or took part in nearly 5,500 consumer information programs in 823 counties.

One of the most significant accomplishments in extension marketing work under the Research and Marketing Act during the year was the development of an expanded marketing information program in New England under the supervision of a committee which included the six New England extension directors. The program operated in each of the six States, with a central office in Boston. It helped consumers to learn better food buymanship, and also worked with producers and food handlers.

As part of the project, each of the State and county extension services developed or expanded the education work in marketing. The central office assembled and interpreted information on food



marketing and disseminated it through the extension services and other channels. It supported the marketing information of the State and county extension services. It interpreted and encouraged the use of market reports and information already being issued by State and Federal agencies. Although this was not a new field of work for the Extension Service, the cooperative project greatly increased Extension's helpfulness to the people of New England and enabled people to be reached who never before had been assisted.

As a result of cooperation between Extension and the Agricultural Research Administration of the United States Department of Agriculture, a consumer education workshop was held in Louisville, Ky., for extension workers. Sixty-four persons from 34 States and Puerto Rico attended and made considerable progress in patterning Extension's consumer education work.

### HELP WITH HOUSING SOARS

The farmhouse is not only home for the farm family, it is also the nerve center of the farming business and a workshop where the many tasks of rural homemaking are carried on. So it needs to be not only a pleasant, comfortable place to live in, but an efficient office and work place. Yet most farmhouses were built for an earlier day when farming and homemaking were carried on by horse-and-buggy methods. Long years of low farm income before the Second World War and scarcities of labor and materials during the war meant that farmhouses became more and more run-down and obsolete—entirely inadequate to present-day farming and homemaking. The end of wartime conditions released farm people's pent-up demand for improved housing, and during the year they pressed extension workers for information and suggestions.

The best efforts of both agricultural and home economics extension workers were required to meet the many requests from rural people for help with all sorts of problems relating to housing. During the year, they helped 51,000 families with the construction of new homes and nearly 117,000 with the remodeling of homes—both all-time highs. They helped nearly 51,000 families with the installation of sewerage systems, 56,000 with the installation of water systems, and 30,000 with the installation of central heating. They helped 223,000 families to provide themselves with needed storage space in the home, and 228,000 to rearrange or otherwise improve their kitchens. They aided 94,000 families in arranging laundries better and 28,000 in installing sanitary closets or outhouses. Often the extension educational work done on the improvement of home grounds was coupled with home building or remodeling. Because of their great interest in attaining better homes, it was not unusual for more than 100 farm people to attend a local housing meeting, tour, or demonstration.

Much of Extension's contribution to housing consisted of showing rural people the possibilities of better housing for better family living; giving them information on new materials and building plans; making plans available to them; serving as consultants and answering questions on arrangement and construction; and emphasizing proper planning, good standards of construction, and possible economies.



Extension teamed with other agencies to carry the best available information to people. Six regional meetings were held for extension specialists, representatives of the Farmers Home Administration and the Agricultural Research Administration, and staff members of State agricultural experiment stations. The experts pooled their building plans and technical information, developing minimum standards for farmhouses in each region. They agreed on a united approach to give farm people the greatest help possible with the resources available.

To help farm people make the most of their money and other resources in getting better housing, extension workers encouraged them to use labor, equipment, and timber and other materials available on the farm. In Arkansas, where special emphasis was given to this work, Extension helped rural families to save \$2,000,000 through the use of home labor and materials in building nearly 2,000 new houses worth nearly \$5,500,000. Other families were similarly aided in saving more than \$1,500,000 in remodeling about 7,500 houses.

### **BETTER HOME AND COMMUNITY SURROUNDINGS**

Extension work looks toward better home and community surroundings, as well as adequate income, good nutrition, and the other factors in a satisfying life. During the year, both rural and urban people again showed that they are interested in this aspect of extension work. Their demands were never greater for information on planning home grounds and farmstead improvement, growing lawns and ornamental trees and shrubs, and beautifying home surroundings. School, church, and community organizations joined in the requests for help with landscaping problems. Extension workers did their best to meet these demands. Though considerable work with individuals was necessary, meetings were used as much as possible to reach more people. Nearly 413,000 families were aided in improving their home grounds, and 33,000 were aided in planting windbreaks or shelterbelts.

The results obtained in Louisiana are representative of extension accomplishments in the improvement of home and community grounds. As a result of extension teaching, nearly 45,000 families improved their home grounds during recent years. In well over half of these families, both parents and children worked together to bring about the improvement. Also, as a result of Extension's assistance, white and Negro home demonstration clubs, 4-H Clubs, and community organizations in the State planned, carried out, or maintained the following projects: Planting the grounds of 172 schools, landscaping the grounds of 126 churches and of 16 courthouses, and establishing 13 parks or recreation areas. During recent years county home demonstration agents and the State extension garden specialist cooperated with such organizations as parent-teacher associations and garden clubs on 170 projects.

Extension workers cooperated in the Nation-wide Plant America movement, initiated by the American Association of Nurserymen. This campaign is giving impetus to the improvement of home and public grounds. It promotes the planting and replanting of farms, forests, cities, communities, and homes to conserve and improve natural resources and to beautify America. An example of extension

projects carried on in cooperation with this movement was the series of district farm and home landscape schools held in Ohio that reached people in 70 of the State's 88 counties. A monthly extension news letter, *Garden Notes*, carried information on the movement to about 5,000 people in the State.

### **HOME-PRODUCED FOOD FOR BETTER LIVING**

One of the avenues toward better rural living is the home-produced food supply, including produce of the home garden. During the year, extension workers carried on educational programs to help rural people use their home food production sources wisely for economy and better health.

Enthusiasm for home gardening has declined since the close of the Second World War Victory Garden Program. Nevertheless, there has been considerable hold-over of interest. Moreover, the home garden has always been part of their way of life for many rural families. Increasing use of freezer lockers and home freezer units stimulated the desire of many families during the year to raise their own food, especially small fruits. Extension programs helped to meet the needs of rural people for knowledge of what to do and how to do it for sound results in home food production and preservation and storage.

A hit-or-miss approach to providing the home food supply is of little value to the family and may be disrupting to the business side of farming. So extension workers stressed careful planning to meet the family's food needs and fit home food production into sound farming operations. In Mississippi, for instance, families were encouraged to make home food supply inventories, budgets, planting plans, and preservation plans in January. In Missouri, families cooperating in Extension's balanced-farming program were aided in planning and working out the family food supply in integration with the other activities on the farm.

### **1½ Million Families Helped With Food Production**

Extension workers gave nearly 1½ million families in about 2,500 counties information and training on improved production of vegetables, fruits, meats, milk, poultry, and eggs. Educational help with home butchering and meat cutting and curing was given to about 225,000 families. Help with problems in canning, freezing, drying, and storing foods was given to more than 1½ million families. A total of more than 335,000 families were assisted in producing and preserving their home food supply according to a food-supply budget for the year.

Producing and preserving part of the 8,500 pounds of food it takes to feed a family of five for a year is a job that concerns all members of the family. 4-H Club boys and girls, by having gardens, raising chickens, hogs, and other livestock, and canning large quantities of food, made a big contribution to the family table.

On Arkansas farms, 3,133 small-fruit plantings and 3,863 home orchards, which included some small fruits, were established during the year under extension influence. As a direct result of help given by the extension horticulturist in North Carolina, 210,000 strawberry



plants were set out, 95,000 by veterans and 25,000 by 4-H Club members. Also 800 blueberry plants were ordered cooperatively by 38 farm families in 25 North Carolina counties. More plantings were made as the result of other extension activities and as a result of independent action. In the small-fruit program in West Virginia, extension forces stimulated the cooperative purchase of 318,697 strawberry plants in 23 counties—enough to plant 260 acres.

### **Much Food Preserved by Freezing**

When electric lines were extended and automatic refrigeration became available locally, farm people were quick to add freezing to their other methods for preserving home-grown food. The call on Extension for freezing information was heavy and resulted in assistance to 756,000 families during the year. Extension workers in all the States held special schools and demonstrations to explain freezing methods. The North Carolina Extension Service conducted a 4-day short course on frozen foods for all its home demonstration agents, so that they would be equipped to answer questions.

Canning, however, continued to be the most prevalent method of home-food preservation. Extension workers gave educational assistance to well over a million families on canning, as compared with assistance given to about 756,000 families on freezing. Help in preserving fruits and vegetables by storing was given to more than 335,000 families.

Curing and smoking was still the major means by which farm people preserved the pork from about 12 million hogs that they dressed during the year for their own use. Extension worked closely with both farmers and locker-plant operators who salted this meat. In the South, winter temperatures are too high for safe curing, and estimates of spoilage in home-cured pork there run as high as 15 percent, mostly in hams and shoulders. Use of refrigeration for preserving meat in that area expanded as a result of extension work.

### **Pride of the Family**

The satisfaction that the rural family takes in its home food supply is indicated in this statement by an Oklahoma woman, one of the hundreds of thousands of rural homemakers who received educational help from Extension:

Many times this past season I have been weary at the end of the day, which was busy with gardening and later with canning from the garden. However, when I open the cellar door now and I am greeted with the sight of red, green, yellow, and purple jars of food before me on the shelves, and the onions and potatoes drying their "eyes" in the bin, I know that the drops of sweat and the labor were not in vain. Here before me lies not only the vision of balanced meals to come, but also the very meal itself. Only a few extras, such as seasonings, breads, and dairy products need to be added for the complete touch to healthful eating. With better eating comes good health, steadier nerves, a calmer mother, a more competent work and play team for the whole family. We planted our garden together, harvested and canned, for the most part, together. We eat it together and the results mean better living through better eating.

This homemaker reported that the home-produced food she and members of her family had stored, canned, and cured was worth \$366, not counting the value of fryers and other foods eaten fresh.



To stimulate interest in food preservation, Puerto Rico extension workers held 14 pantry tours, attended by 235 rural women and 4-H Club girls who had not been canning food themselves. These women and girls were interested in observing what their neighbors had accomplished. As a result of the tours, many of them asked for extension demonstrations on how to can.

### **Local Markets for Perishables**

Farm families who finally abandon the lifelong habit of one-crop farming and venture into the field of diversified production, often worry about the marketing of their small beginnings and the income to be received from their new crops. The 11,000 frozen-food locker plants distributed through all the States have created a welcome local outlet for small or even large quantities of locally grown meat, poultry, fruits, and vegetables. Both patrons and locker-plant operators called heavily upon Extension for information and assistance.

## **FOOD FOR ENJOYMENT AND HEALTH**

Eating the right foods in the right amounts is one of the main avenues toward having a strong, healthy people. Providing her family with such foods and seeing that they are attractive and tasty are among the main concerns of the homemaker. She is always seeking new and practical ideas on doing these things. Her interest and Extension's response to it during the year are indicated by the fact that county home demonstration agents devoted the major part of their time and effort to educational work related to planning, producing, preserving, preparing, and serving the family's food.

In spite of the availability of plentiful supplies of all kinds of foods, studies have shown that American diets are not so healthful as they should be. One of the reasons for this is that family food habits, though improving, still lag behind scientific discoveries of a person's needs for different vitamins, minerals, proteins, and other food substances. Consequently, extension workers used every opportunity during the year to teach better nutrition. However, they realized that scientific information on nutrition seems technical and abstract to many homemakers, so they taught nutrition principles in terms of the women's interest in pleasing their families with varied meals, tempting dishes, and attractive serving. Sound nutrition principles were applied to all aspects of foods, including the planning of the purchased or home-produced food supply; freezing, canning, and storing; and the use of improved recipes for food preparation.

In addition to the educational work done on production and preservation of the family food supply, extension workers helped 1,550,000 families with food-preparation problems, and 10,000 schools with the establishment or maintenance of hot-lunch programs. They helped nearly as many families to have more healthful diets and 225,000 mothers to solve child-feeding problems.

### **Women Learn More About Milk**

North Carolina provides an example of how extension education on food preparation promoted better nutrition. The women in home demonstration clubs in 27 counties decided to devote a program to



the food value of milk and the preparation of dry milk. In the program, the home demonstration agent discussed the nutritional value of milk and the dietary need for it as shown by surveys in a number of counties. The importance of including milk in the diet every day was stressed. To help families who could not have a cow and needed to use dry skim milk for economy, the agent showed how to make liquid milk out of dry milk solids. She demonstrated the use of the milk in a cooked dish such as creamed soup, cocoa, or soft custard.

In three counties in Oregon a special project was carried on to help homemakers prepare adequate, appetizing meals at reasonable cost. In 1948 and 1949, 812 homemakers were helped by this project to plan better-balanced meals; 736 were helped to plan tasty and attractive meals; and 755 were aided in methods of food preparation. These homemakers passed the information on to 1,750 persons outside their families.

### **Good Food Makes Alert Youngsters**

The practical value of extension nutrition work during the year is also illustrated by an example from a county in New York State. The grade school supervisor asked the county home demonstration agent to teach the mothers of school children about nutrition and meal planning. The children had been falling asleep in school in the morning and doing poor work; the supervisor thought that the principal cause was poor nutrition. The agent held a series of evening meetings for the mothers, and the children were interested during school hours in better nutrition. Many of the mothers were young and had little knowledge of how to feed their children for health. As a result of the extension program, the problem of sleepiness in school was overcome. Also, a school-lunch program was started.

Three regional nutrition conferences were held for State extension nutritionists, and a fourth was planned for the summer of 1950. The conferences served as refresher courses for the nutritionists, and enabled them to acquire and exchange information that would be helpful in the conduct of State and county nutrition programs. Each conference covered recent research on nutrition and food habits, effective ways of teaching the subject, and the evaluation of extension teaching in the field of foods and nutrition.

### **WOMEN SEEK CLOTHING ASSISTANCE**

After the Second World War, most county home demonstration agents expected a decline in the number of requests for help in home sewing as ready-made clothing became plentiful, better, and more reasonable in price. However, demands for assistance in solving home-sewing problems continued. During the year, extension workers helped more than 1 million families with problems of clothing construction—a record high. One reason for the increased interest in home sewing may be that home labor-saving equipment is freeing more of the homemaker's time for sewing.

Women also kept up a lively demand for educational help with the selection of clothing and textiles. Extension workers gave such help to nearly 900,000 families—also a record high. They helped more



than 617,000 families with the care, renovation, and remodeling of clothing, and helped 140,000 families with clothing accounts or budgets. An increased amount of educational work was done with young mothers. They were especially interested, because clothing is more important socially to young families than to older couples, and they also have the financial problem of clothing their children.

An example of effective extension organization to carry information about clothing construction to a large number of women was to be seen in Oregon. Extension workers taught volunteer local leaders so that they could take full responsibility for workshops. A total of 534 workshops were held in 15 counties during the year, and 427 of these were carried on by the leaders. Some of the leaders held several workshops. At achievement festivals and community teas, 2,376 women modeled the dresses, suits, and coats they had made in this project. The women estimated that by making this clothing they had saved \$28,500. The workshops were held in addition to the regular clothing extension work done in these counties.

### **Sewing Brings Satisfaction**

The saving that women made by taking part in the project was not the only benefit obtained. Just as important was the pleasure and satisfaction that they got out of learning how to construct a garment easily and well. It was evident that they would make many more garments after the workshops, and that they were extending the educational work by helping neighbors and friends. The project developed the abilities and talents of local leaders. In spite of the great amount of time and energy required of them, they were anxious to continue their work.

The increase in extension assistance to women in the selection of clothing and textiles resulted from new developments in textiles and the increased availability of interesting functional clothing in the mass markets. Women and girls wanted to know about these developments and needed help in deciding what to buy to suit their purposes. In West Virginia and New Hampshire, trips to stores and help from store personnel proved valuable in this work with 4-H Club leaders and members. In Maine, extension workers held 123 area and county meetings for 2,126 homemakers on the buymanship of men's and boys' clothing, including work clothes. Stores lent merchandise for use at the meetings and many of their representatives gave talks and answered questions.

In Iowa and Utah, extension clothing specialists taught simple sewing practices by television. In Maryland, a county home demonstration agent used television in teaching the making of a complete garment. In other States, sewing was taught by radio.

### **HOME FURNISHINGS AND MANAGEMENT**

Wise saving and spending of money and time make many improvements in home living possible. During the year extension workers, aided by nearly 60,000 volunteer local leaders, helped rural families in 2,300 counties with better management of money and time in the home. The largest number of families helped in this phase of exten-



sion work were the 690,000 families assisted with consumer buying problems. In addition, 607,000 families were aided in using timely economic information in making buying decisions or adjustments in family living. A total of 466,000 families were aided in arriving at decisions on making versus buying.

Extension workers helped nearly 300,000 families with time-management problems, 105,000 with home accounts, 156,000 with financial planning, and 52,000 in improving the use of credit for family living expenses.

Interest on the part of women in improving the furnishings of the home paralleled the increased activity in home construction and remodeling. Extension workers gave educational help to more than 313,000 families that had problems in the selection and buying of home furnishings, and to nearly 190,000 families that were interested in the purchase of household supplies.

In Oregon, extension workers taught homemakers how to make new furnishings and how to recover and renovate furniture. As a result of a series of "schools," women reupholstered 52 davenports and 368 chairs. They repaired 54 pieces of furniture and slip-covered 46 chairs. They finished 234 pieces of furniture, including 37 pieces of old furniture refinished. They built 417 footstools. In Ohio, educational help on home furnishings was given to nearly 21,000 families.

New Jersey provides an example of how the Extension Service helped homemakers to make their chores easier and more convenient. Eleven women in one neighborhood learned how to analyze and improve household tasks. They all had inadequate storage and poor laundry facilities, with no convenient way of drying and ironing their wash. They decided on a place to store their ironing boards on the first floor, moved their washing machines out of their crowded kitchens into the basement, installed hose connections to the machines, and put up clotheslines in the basement and out of doors. They told the remaining 15 women living in the neighborhood how satisfactory these arrangements were, and, within a month, all 26 had the same improvements.

### IMPROVING FAMILY LIFE

Extension workers contributed during the year to successful family relationships and wise rearing of children. With the aid of 41,000 volunteer local leaders, they carried such educational work into 26,000 communities in nearly 2,000 counties. They helped more than 380,000 families to achieve improved family relationships, and helped more than 320,000 with problems of child development and guidance. As a result, 166,000 families provided recommended clothing, furnishings, and play equipment for their children.

Although most of the extension work in parent-education is carried on by county home demonstration agents, nearly 28,000 men as well as 235,000 women participated in it. They were parents of nearly 460,000 children. Never before had people shown so much interest in family relationships and child-development education and never before had extension workers been able to achieve so much in these fields.

Cooperation within the home through democratic planning, working, and sharing was advocated in extension work in both family relationships and home management. Families were encouraged to discuss their goals so that the objectives of the family members might be integrated. In Illinois, discussions were held for older people on the enjoyment of old age. In one county, 57 of 546 older people reached through such discussions chose a new hobby as a result of this program. In Michigan, planning for old age was encouraged, and discussions were held on the problems of aging people.

In many States, special training in counseling was given to county extension agents. The method of counseling taught encourages people to think through their problems carefully and to find their own solutions.

One of the problems of home demonstration work is to reach mothers with young children who either have to stay home from meetings or take their children with them. In 14 States, extension workers helped home demonstration clubs make plans for the care of children during meetings. Volunteer leaders were given training in play-school methods. As a result of such work, many more young mothers were able to become active members of extension groups and also learned good methods of caring for children. Each mother in one home demonstration club in Arkansas made a child's toy. These toys were kept by the club president and taken to each meeting. An older girl, usually a 4-H Club member, supervised the play of the children during the meeting. Both the membership of the club and the attendance at meetings increased. In Pennsylvania, play schools were held for 274 children in connection with 20 county-wide meetings.

### **LOOKING BEYOND FARM AND HOME**

"The search must be intensified for more effective ways of stimulating the urges of rural people to seek and find solutions to their problems, rather than ways of handing them measured doses of information to satisfy immediate needs." This was one of the recommendations on extension work made in 1948 by a committee representing the United States Department of Agriculture and the Association of Land-Grant Colleges and Universities.

To assist in carrying out this recommendation, the Extension Service during the year inventoried its work in the field of public questions and developed it to meet the growing need more effectively. Particular attention was given to stimulating rural people to become better informed on local, State, national, and international problems. The emphasis was not on any process of pouring quantities of information into people, but rather on promoting interest, and learning through club and community discussion meetings.

Because of the tense international situation, rural people welcomed Extension's increased effort to promote understanding of world problems. Extension workers carried on many activities to help people discuss and understand the issues.

#### **"Food and People" Discussed**

Special effort was given to encouraging discussion of the topic Food and People, which had been chosen by the United Nations



Educational, Scientific, and Cultural Organization for world-wide study in 1950. In disseminating factual material on this subject and stimulating discussion, Extension helped people to understand the problems involved in improving agriculture and nutrition all over the world. The extension educational work on food and people was carried on in cooperation, not only with UNESCO, but also with the Food and Agriculture Organization, which prepared the background information.

Extension workers are technical experts in agriculture and home economics, but most of them have had only limited experience in helping people consider and discuss national and international trade and farm price policies, public finance, and other public questions. To equip them better in this field, training in public-policy work was conducted for county extension agents. One of the principal accomplishments in this field was a conference on educational methods in public-policy work, held by the Farm Foundation. Seventy representatives of State extension services attended and carried back to other extension workers in their home States a better understanding of how to conduct this type of educational work.

### **Farm Price Support Information**

Farm price support was one of the controversial subjects in the minds of rural people during the year. They were greatly interested in the question, yet lacked adequate information on it. So extension workers explained the situation and the proposed remedies. They promoted discussion meetings so that rural people could exchange information and opinions. They carried such educational work on national price and trade policies into 6,000 communities in 750 counties. They carried similar educational work on land policy and programs into 4,800 communities. In 6,400 communities, 8,200 local groups were aided in discussing problems of local government, public finance, and farming conditions. Nearly 2,000 tours were held to enable rural people to observe economic and social conditions in various land-use areas. State and county rural policy committees, most of them organized by Extension in previous years, were given help in considering a wide variety of public questions, particularly those closely affecting rural life.

In Kansas, home demonstration club women played a leading role in the work of local UNESCO councils. Home demonstration women from Massachusetts, Connecticut, New York, Pennsylvania, Rhode Island, West Virginia, and Indiana, and other States visited the United Nations headquarters at Lake Success.

With Extension's help, rural people studied their problems. Then they worked to get such improvements as better schools, better roads, electric service, and telephones. As one farm woman said, "It's all very well to discuss our problems, but discussion should lead to action. Let's do something!"

### **EDUCATION FOR HEALTH**

Extension workers carried on a variety of educational programs during the year to help rural people be healthy and have access to medical care, hospitalization, and other services that are essential in



achieving and maintaining health. Much of this work was done in close cooperation with Federal, State, and local organizations and agencies. Special attention was given to informing rural people of the opportunities available to them under the Hospital Survey and Construction Act of 1946. Seventy-one percent of the hospital construction projects approved in 1949 under the act were in towns of less than 5,000 people.

Improvement in personal and family health was emphasized in extension programs during the year. More than 435,000 families were aided in preventing colds and other common diseases. Nearly 225,000 families were given educational help on first aid or home nursing.

Six hundred and eighty thousand families were helped with the removal of fire and accident hazards. Better health was a major goal of extension work in nutrition and foods, discussed elsewhere in this report.

The Extension Services of Arkansas, South Carolina, and West Virginia prepared guides for family health planning. As a result of extension health programs, nearly 41,000 rural people in 53 counties were immunized against diseases, and 1,000 children in North Dakota had their teeth treated with fluoride to prevent decay.

### Community Health Planning

Extension program planning activities emphasized planning for better community health. As a result of the efforts of extension workers, nearly 2,500 nutrition or health clinics were organized. In a demonstration in 9 Ohio counties, extension agents led in the establishment of rural health councils and health committees as part of agricultural planning committees. With the leadership of extension workers and volunteer local leaders, several Ohio counties undertook surveys of local health conditions. On the basis of such a survey in Columbiana County, a long-range program was initiated that includes a preschool clinic, a plan to test all cattle for brucellosis, a program of dental health education, the addition of nurses to the county health department, and the obtaining of two doctors for an isolated community.

Extension's educational help to families in controlling flies, mosquitoes, and rats; in improving their water supplies and sewage disposal systems; and in combating brucellosis and other animal diseases endangering human beings promoted the health of both rural and urban people.

Extension workers cooperated in the observance of Cancer Control Month and in year-round efforts to reduce the toll of cancer. Outstanding work was done in Arkansas, where thousands of home demonstration club members received and helped to distribute material on cancer education and helped with cancer clinics.

The March of Dimes campaign was another health undertaking in which Extension cooperated. Starting with a goal of \$5,000, the 50,000 4-H Club members in Oklahoma raised more than \$10,000 in an additional fight against polio. This project began after a number of 4-H summer camps were canceled because of a severe outbreak of polio in the State. The funds raised were given to help equip a new center in Oklahoma City for control of communicable diseases.



## RECREATION BUILDS RURAL LIFE

Recreation can vitalize a gathering; it can build up community spirit, neighborliness, and group cooperation; it can add to personality and release latent talent and leadership. Because of its importance in rural home and community life, recreation continued to be one of the phases of extension education during the year.

Rural families asked extension workers for more information and help on improving recreation for the family, the community, and the local organization. They were especially interested in recreation for youth. In response to their requests, extension workers helped more than 606,000 families to improve their home recreation facilities and practices. They helped 30,000 communities to improve community recreation facilities. They, together with volunteer local leaders, made recreation of some kind a part of most extension meetings, whether on agriculture or homemaking, or whether for men, women, youth, or children.

Training rural people to acquire the confidence and ability to lead recreation at organizational and community affairs was an important part of the extension recreation program. For example, in Pennsylvania 109 county or district recreation meetings were held and attended by more than 10,000 representatives of churches, 4-H Clubs, and other organizations. In Ohio, 15 district and county schools were held to give officers and leaders of rural groups training in handling meetings and conducting recreation programs. In Illinois, more than 15,000 leaders, including youths, from 85 counties attended 63 recreation-training meetings. Three of these were music workshops and two were schools for camp leaders.

### Rural People Make Music

Cultivating the great reserve of unused musical talent in rural areas can lead to recreation that is constructive for the community and satisfying to the individual. In a number of States, extension workers helped in the organization and development of county choruses of rural women. There were 25 such choruses in Illinois, 30 in Indiana, 30 in Kansas, and 30 in Iowa. In South Dakota, the extension recreation specialist started a project for helping rural school teachers with music and recreation in their schoolrooms. The Extension Service cooperated with the American Music Conference and other organizations in helping the people of Juneau County, Wis., develop an outstanding program of choral singing and other musical activities.

There was a trend toward more family-centered recreation and toward handicraft and drama as well as music. In several States, extension workers gave increased attention to arranging handicraft-training meetings for 4-H Club leaders and others. A rural writers' project was featured in Wisconsin. Drama festivals, music festivals, or folk festivals were held in New York, New Hampshire, Illinois, South Dakota, Colorado, and several other States. Amateur dramatics was stressed in New York and North Dakota. In Wisconsin a Let's Draw course was taught by radio by the extension recreation specialist. It was participated in by 58,500 school children.

Extension workers in Indiana helped in the establishment of three demonstrations of county recreation departments. In these demon-



strations, the county has a full-time recreation director who conducts training meetings and helps small-town and community groups in planning recreation programs and community recreation facilities. Many groups in these counties now have more recreation at their meetings, several communities have new parks or playgrounds, and several schools have been made available for community use and year-round recreation.

Extension's primary aim in all these educational activities was to help the people help themselves by showing them how to analyze their own local needs and how to organize for recreation and other community improvement. To facilitate this, extension workers fostered the organization of community and county recreation councils.

### **EXTENSION—A DEMOCRATIC PROCESS**

Extension work during the year was not merely the handing out of information through meetings, personal visits, bulletins, and other media. Rather, it was a cooperative educational program which rural and urban people helped to plan and took active part in carrying on. With the conviction that planning, in itself, can be a significant educational experience, extension workers gave people every encouragement to participate in it.

An essential part of program planning was the gathering and interpretation of background information. Home demonstration club women made many surveys and simple studies of local housing conditions, health facilities, food needs, and family life problems. Rural people used results of research as well as local experiences in analyzing important problems. Extension subject-matter specialists and representatives of other agencies serving agriculture served as consultants to local program-making groups. Through newspapers and radio programs, the public was advised of the progress being made in problem analysis and programs developed to meet the needs of agriculture and homemaking.

The result of the program-planning effort was a greater understanding of local situations; State, national, and even international policies of local concern; programs for local areas which local people have developed and which they support; and, a development of attitudes, knowledge, and skills that assure competence in meeting new problems as they arise. As one planning leader expressed it, "Rural people are most interested when they build their own programs, based on the situation as they see and understand it." Extension workers in nearly every State placed special emphasis on program-planning methods that call for wide participation on the part of local people. About 492,500 men and women served on county extension planning committees.

### **ON THE CALENDAR**

Extension work, except that of a seasonal nature, was done on a year-round basis. Yet there were a number of special occasions that provided an opportunity for intensive work that was particularly timely.

One such occasion was National Home Demonstration Week in May. Throughout the 48 States, Alaska, Hawaii, and Puerto Rico, special



meetings and programs were held by extension workers and home demonstration club members. Exhibits were shown at such meetings and placed on view in store windows and other public places. Local and network radio and television programs and articles in newspapers and magazines told about home demonstration work and its accomplishments. Altogether, more than 6,000 meetings were held in observance of the week. They were attended by more than 300,000 people. More than 1,500 radio programs and more than 7,000 newspaper stories dealt with the week. The observance inspired home demonstration clubwomen, volunteer local leaders, and extension workers to renewed efforts. Many women were made better acquainted with home demonstration work and encouraged to seek its benefits.

National 4-H Achievement Week in the fall and National 4-H Club Week in late winter were periods of special activity in reporting the accomplishments of 4-H Club members, recognizing the contributions of volunteer leaders, and encouraging more boys and girls to take advantage of the opportunities of 4-H work. Articles on 4-H activities in the press, and salutes, messages, and special features on many radio and television programs helped to mark these weeks.

National Farm Safety Week, Spring Clean-Up Week, and National Fire Prevention Week, in October, were three occasions when extension workers used a wide variety of methods to impress on rural people the importance of eliminating accident and fire hazards. Pamphlets were distributed giving facts on the seriousness of fire and accident losses and recommendations for lessening them. Circular letters, newspaper articles, radio programs, and demonstrations were other means employed.

### **Preventing Fires and Accidents**

Although much educational work was done immediately before and during each of these weeks, educational work in fire and accident prevention was carried on throughout the year, as well. Much of this work was done in cooperation with the National Fire Protection Association and the National Safety Council. People who live on farms usually do not have proper help or equipment available when a fire breaks out or a serious accident occurs, whereas city people ordinarily have prompt medical aid or the assistance of a good fire department. This means that it is especially important for the rural family to prevent both accidents and fires. During the year, extension workers helped 680,000 families to remove fire and accident hazards. They trained 510,000 4-H Club members in fire and accident prevention.

Extension workers gave educational support to a number of other "months," "weeks," "days," and other campaigns directed toward such worth-while goals as better health, friendly international relations, and the improvement of family and community life. These occasions and campaigns included United Nations Day, the March of Dimes, Cancer Control Month, Brotherhood Week, the savings bond campaign, National Employ the Physically Handicapped Week, Child Health Day, Pan-American Day, National Apple Week, and National Rice Week.

## TO MAKE EXTENSION'S BEST BETTER

Extension workers were proud of their work. But they were not complacent about it. As the 4-H Club slogan expresses it, they tried "to make the best better." With a feeling of responsibility to the people they serve, they looked inquiringly at their work to see how they could improve it and reach more people. To do this, they used scientific techniques of evaluation. Then, they followed up on the findings of their studies with careful consideration of how to apply them in their work.

There was a trend in extension studies toward basic research that takes into account the psychological reactions of people and wider coverage of the factors contributing to the successful conduct of extension education. Studies were under way during the year of the functioning of extension organization and management, program-planning procedures, organization of people for extension teaching and lay leadership, the effectiveness of extension programs and the extent of people's participation in them, personnel training, and extension teaching methods and activities.

An example of the fruitfulness of extension studies in better extension work was evident in one Massachusetts county. One of the findings of a study of 4-H Club work in six New England counties was that high-school boys and girls stayed in 4-H Club work longer if their parents were interested in 4-H Club work. Considering this, the 4-H Club agent in Plymouth County decided to enlist the participation of parents in 4-H affairs. He held meetings of the parents and leaders of boys in dairy and sheep clubs. He encouraged the parents to help decide policies and make plans for the 4-H livestock program in the county. Also, he issued a leaflet on the opportunities that exist for parents to cooperate in 4-H Club work. Reporting on the parent-leader meetings, the agent said:

First of all, we review the past year's activities and ask for discussion pro and con \* \* \*. From the discussion we get definite suggestions for improvement. Thus, over a period of years we are able to incorporate in our livestock program all constructive suggestions made at these leader-parent meetings.

Next week we talk over the coming events, check dates, and ask for program suggestions. By doing this we want the parents especially to feel that they have something to say about programs that are planned for their club members. This tends to strengthen our whole organization, because leaders and parents feel that the county club agent isn't trying to do the job by himself. It also lets the leaders know that the parents are backing them up 100 percent. Having these leader-parent meetings has helped in promoting our 4-H livestock program.

One of the extension studies under way during the year was designed to test new methods of working with compact nationality groups. The study was conducted in a community of Polish people in Wisconsin. The University of Wisconsin cooperated in the project. The study included analysis of family and community needs and the people's knowledge and use of extension recommendations. Though the study was still in progress at the end of the year, it already had some concrete results: The county extension committee had approved the development of a basic plan for the area; the county government had appropriated an extra \$1,000 to be used in organizing result demonstrations in the area; 36 families had been selected for result



demonstrations on soils and fertilizers; and for the first time, farmers had signed up for assistance from the Soil Conservation Service.

### OUR OVERSEAS NEIGHBORS

Of the 480 visitors from other lands who came to the United States during the year, 86 men and women were given intensive training in extension organization and methods. These men and women were from Austria, Germany, Italy, China, Japan, the Philippines, Costa Rica, Cuba, Guatemala, Haiti, Nicaragua, Panama, and Turkey. In addition, such training was continued for 20 persons from 11 countries who had started during the previous year. This intensive training was usually for periods of several months to a year. Each trainee spent considerable time in one or more States, learning about the work of State and county extension workers, who cooperated to make the training program possible.

Emphasis was given to American farming practices in the training given to 113 young farmers from Britain, Denmark, France, India, the Netherlands, and Switzerland. Through arrangements made by extension workers, these men lived and worked on farms. In addition to learning American farm practices, they became acquainted with American farm and community life.

The International Farm Youth Exchange Project, carried on to promote international understanding and peace, had two aspects: (1) Youth from the United States went overseas, and (2) youth from other countries came to the United States. Thirty-one rural young men and women from 22 States spent the summer of 1949 living on farms in 10 European countries under the second annual IFYE project. Then, in June 1950, 42 more from 26 States flew to Europe to spend several months on farms in 14 countries. These young people were 4-H Club members or former members, in their late teens and early twenties. Not only did these young people have an opportunity to get acquainted with European farm life, but their presence in European communities helped to give the people there a better understanding of the United States. After their return to their homes, the 1949 delegates gave more than 100 public talks apiece, telling people of their home States about their experiences. A number of these talks were broadcasted over the radio.

Thirty-four young men and women from 9 European countries lived and worked on United States farms during the summer of 1949. And in the spring and early summer of 1950, about 40 more from 13 countries in Europe and 2 in South America arrived in this country. Assisted and guided by extension workers, these young people gained first-hand knowledge of American rural life to discuss with their compatriots upon their return home.

### The Exchange Privately Financed

The International Farm Youth Exchange project, sponsored and carried on by the Extension Service, is financed by private contributions. Local 4-H Clubs in each of the participating States raise money for the program. In addition, contributions are made by individuals, groups, and organizations interested in the rural youth

exchange idea. The following statement by one of the contributors, a prominent American businesswoman, indicates the interest people have in this project:

When one has seen at first hand the great need of the youth of Europe, one cannot help but wish it were possible to bring over to this country a greater proportion of their young people than we send over there so that they might become fairly inculcated with the principles of 4-H organization and also learn the American way of life.

One hundred and fifty-three persons from Latin America, Europe, the Far East, the Near East, and Africa were given brief orientation on extension work for periods of from 1 day to several weeks during their visits to this country, usually on other business.

Eighteen leaders of rural youth organizations in Canada, Cuba, and Europe arrived in the spring of 1950 to attend an informal "International Open House," held by the Extension Service in connection with the Twentieth Annual National 4-H Club Camp. They attended the major events of the camp and held conferences on methods and accomplishments of rural youth movements in the various countries represented. Following the camp, they went individually to different States and communities to observe extension rural-youth work in action.

### **Extensioners at Work Abroad**

A number of present and former Federal, State, and county extension employees worked in other countries during the year, helping these countries to build extension educational systems of their own and to develop their agriculture.

In making such accomplishments possible on the part of extension workers, the Extension Service cooperated with the Office of Foreign Agricultural Relations, the Economic Cooperation Administration, and the Department of the Army.

Much of the work that has been under way in helping the people of underdeveloped areas to improve their farming and homemaking, has been carried on by missionaries from the United States. Many of them have put considerable emphasis on improving farming practices and the living conditions of backward peoples. Since theirs has been a kind of extension work, they have looked to the Extension Service for suggestions. To help them, Extension, for the sixth consecutive year, cooperated with Rural Missions, Inc., in holding a week's seminar for training in extension education. Twenty-two missionaries who are stationed in many parts of the world attended. Seven missionaries attended the southern regional extension summer school at the University of Arkansas, and then took 6 weeks of practical training under county extension agents in four Southern States.

### **COOPERATION WITH OTHERS**

The cooperative Extension Service is a joint undertaking of the United States Department of Agriculture, the State land-grant colleges, and the localities. But the cooperation extends to many other organizations and agencies. Much of the work accomplished by the Extension Service during the year was done with such cooperation. Extension workers pooled their efforts with those of



other agencies and individuals in order to serve people in a broad, well-rounded way.

As the educational arm of the Department of Agriculture, the Extension Service worked closely with other agencies of the Department in meeting the requests of rural people. Oftentimes extension workers paved the way for service by these other agencies by informing rural people of their programs. The forms of cooperation with these agencies were many. They included joint planning to meet local needs, joint sponsorship of tours and meetings, jointly conducted demonstrations, and assistance in each others' meetings. Indicative of the widespread extent of Extension's cooperation with these agencies are the following figures on the number of meetings held by, or about the work of, these agencies, in which extension workers participated: Farm Credit Administration, 1,700 meetings; Production and Marketing Administration, 17,000; Soil Conservation Service, 17,500; Farmers Home Administration, 3,500; and Rural Electrification Administration, 3,500.

In addition, extension workers took part in 8,000 meetings of USDA councils in 1,400 counties. They participated in 1,500 meetings held by the United States Employment Service; 2,000 held by the Tennessee Valley Authority; 4,500 held by the Social Security Administration, the Public Health Service, and the Children's Bureau; and 7,000 held by other agencies. Just a few of the other organizations and agencies with which Extension cooperated in carrying educational information to rural people were the Food and Agriculture Organization and the United Nations Educational, Scientific and Cultural Organization of the United Nations, the United States Treasury Department, the National Safety Council, the National Fire Protection Association, and the National Foundation for Infantile Paralysis.

## EXTENSION WORKERS GO TO SCHOOL

As a combined technical expert, teacher, supervisor, and administrator, the extension worker continued to face the problem of keeping up to date in subject matter and in the various skills needed in carrying the subject matter to those who needed it. The many new scientific discoveries affecting all branches of farming and homemaking meant a continuous challenge to him. And increasing demands for Extension's help meant that he needed to be professionally alert to ways of doing his work efficiently.

The cooperative Extension Service held many informal "schools," clinics, and conferences during the year to help county extension agents and other extension workers keep abreast of developments. These meetings included talks by authorities in various fields and a pooling of experiences by extension workers themselves. Prominent among such meetings was the National Visual Aids Workshop, held at Cornell University in July, and attended by about 100 persons, mostly extension workers, from 39 States, Hawaii, Puerto Rico, and the District of Columbia. Making better use of visual methods in extension teaching was the central idea of the workshop. It included visual demonstrations, teaching inspiration, idea discussions, shop talks, and practice.



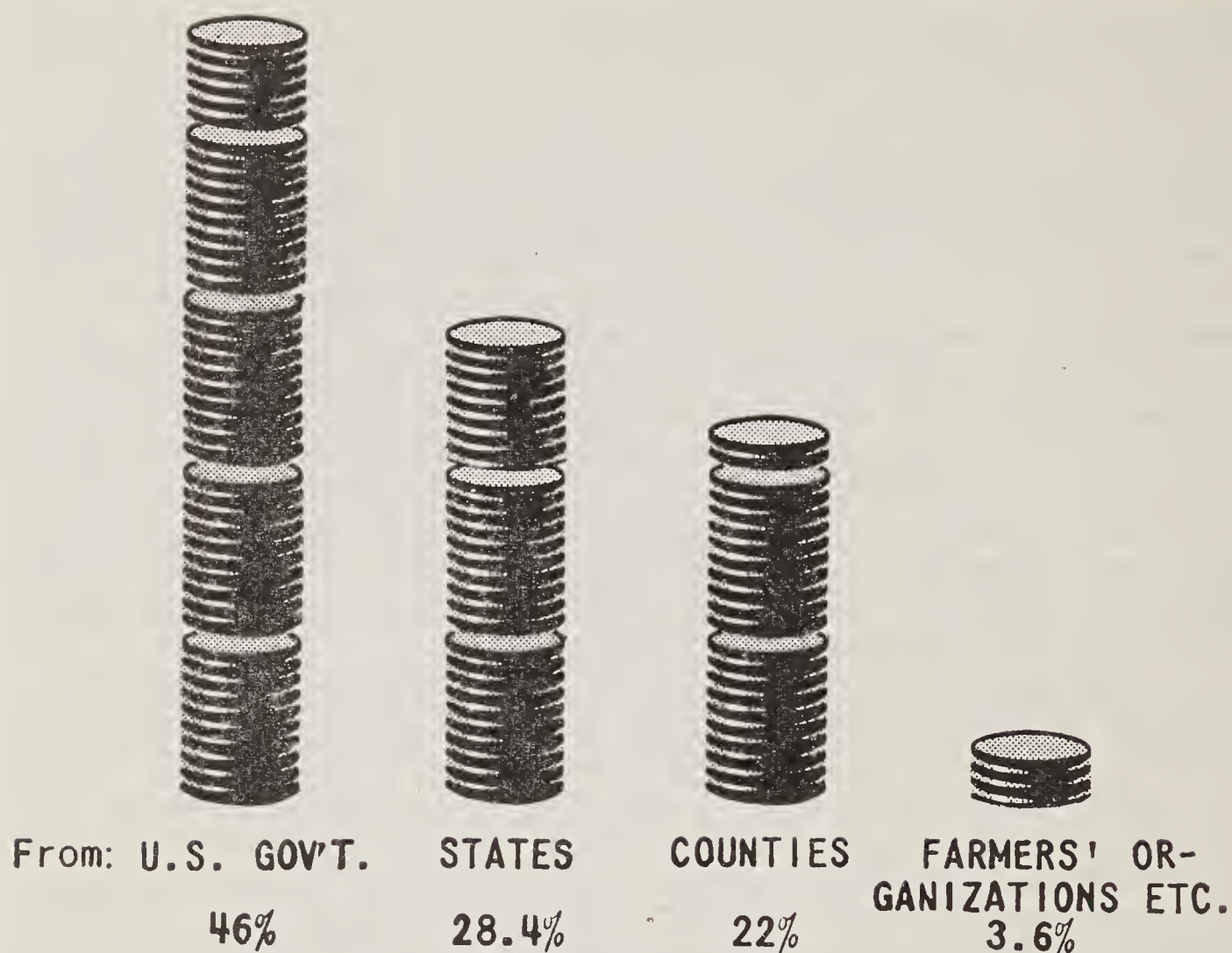


Figure 8.—Sources of funds for extension work, 1948-49.

Another example of the in-service training meetings was the national workshop on consumer education, held in Louisville, in March, and attended by about 65 extension workers from 24 States, Puerto Rico, and the District of Columbia. The participants carried back to other extension workers in their home States many new ideas for use in this expanding phase of extension education.

Practically all State extension services held training conferences and schools for new workers, older workers, or both. An example was the school held at Virginia Polytechnic Institute. Most of the participants were new workers, but older extension workers were present for refresher training and to contribute their experiences.

Many extension workers used vacation leave, sabbatical leave, and specially granted leave in order to take postgraduate courses at universities and colleges. Six hundred and eighteen of them attended the 3- and 4-week extension schools held at eight institutions, including the four regional extension schools at Cornell University, the University of Wisconsin, the University of Arkansas, and Colorado Agricultural and Mechanical College. Of these, 515 were extension agents.

Seventy-two extension workers from 16 States and Hawaii were on special Federal-State leave for study. Eight were working for a doctor's degree, and 34 were engaged in other studies and work for professional improvement. One home demonstration agent who took a short-term extension course said—

So my advice to extension workers is to select the extension summer school of your choice, start planning early, and go. You'll find the folks in your county will get along without you very nicely; oh yes, they'll miss you, but



maybe they'll appreciate you even more when you return; and you will come back refreshed, just bubbling over to get back "in the harness" and put those ideas to work.

Extension workers who were not able to take formal courses during the year used many informal opportunities to keep up to date professionally. One of their aids was the **EXTENSION SERVICE REVIEW**, the official national periodical for extension workers. It presented, each month, a variety of articles on new things in science, important national situations and policies bearing on extension work, and successful programs that were under way in the States and counties.

LEGISLATION AND STATISTICS

On October 26, 1949, President Truman approved Public Law 406 of the Eighty-first Congress, which authorized extension to Puerto Rico of the benefits of the Bankhead-Flannagan Act of June 6, 1945.

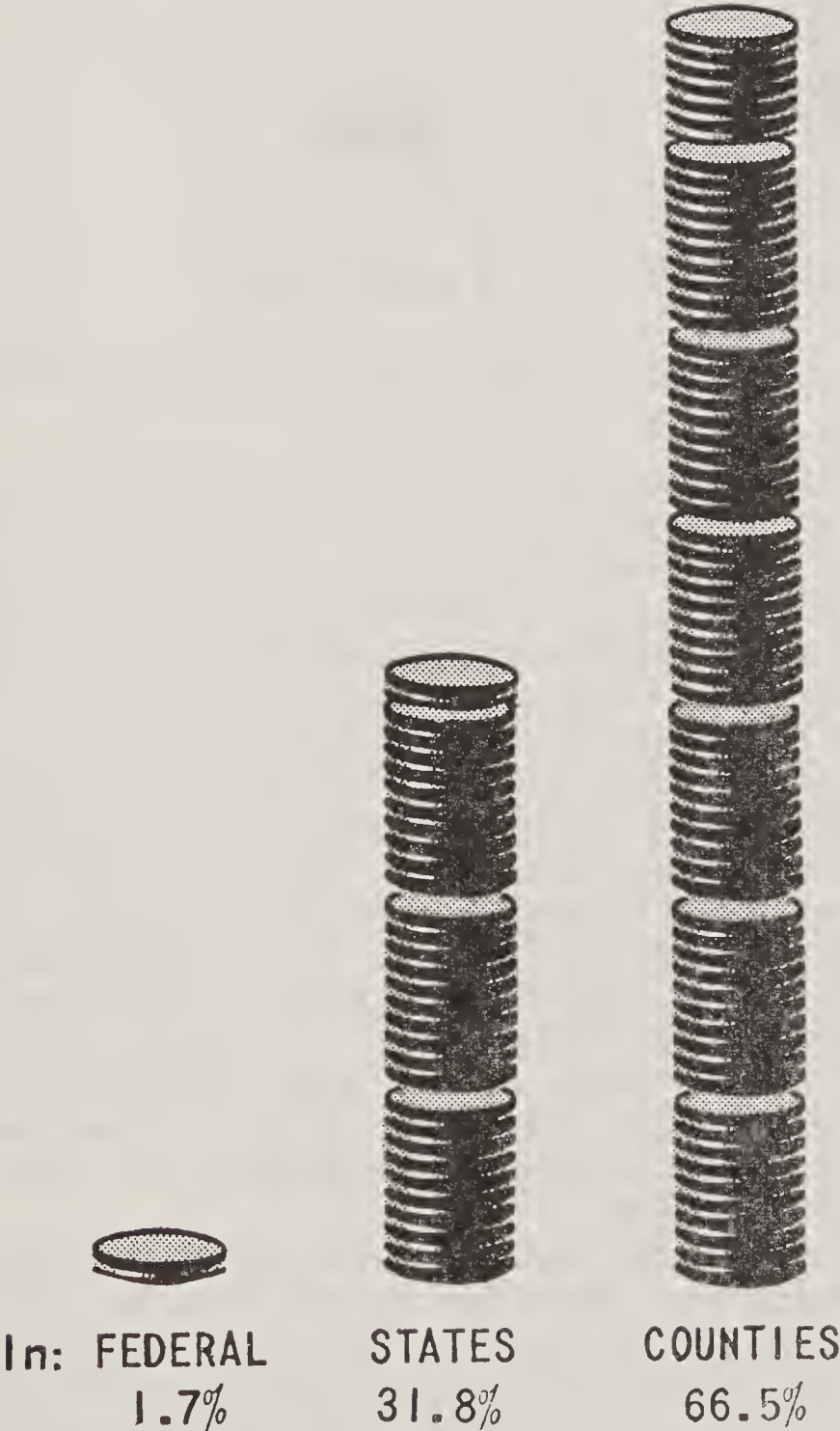


Figure 9.—Funds spent in Federal, State, and County Extension Offices, 1948-49.

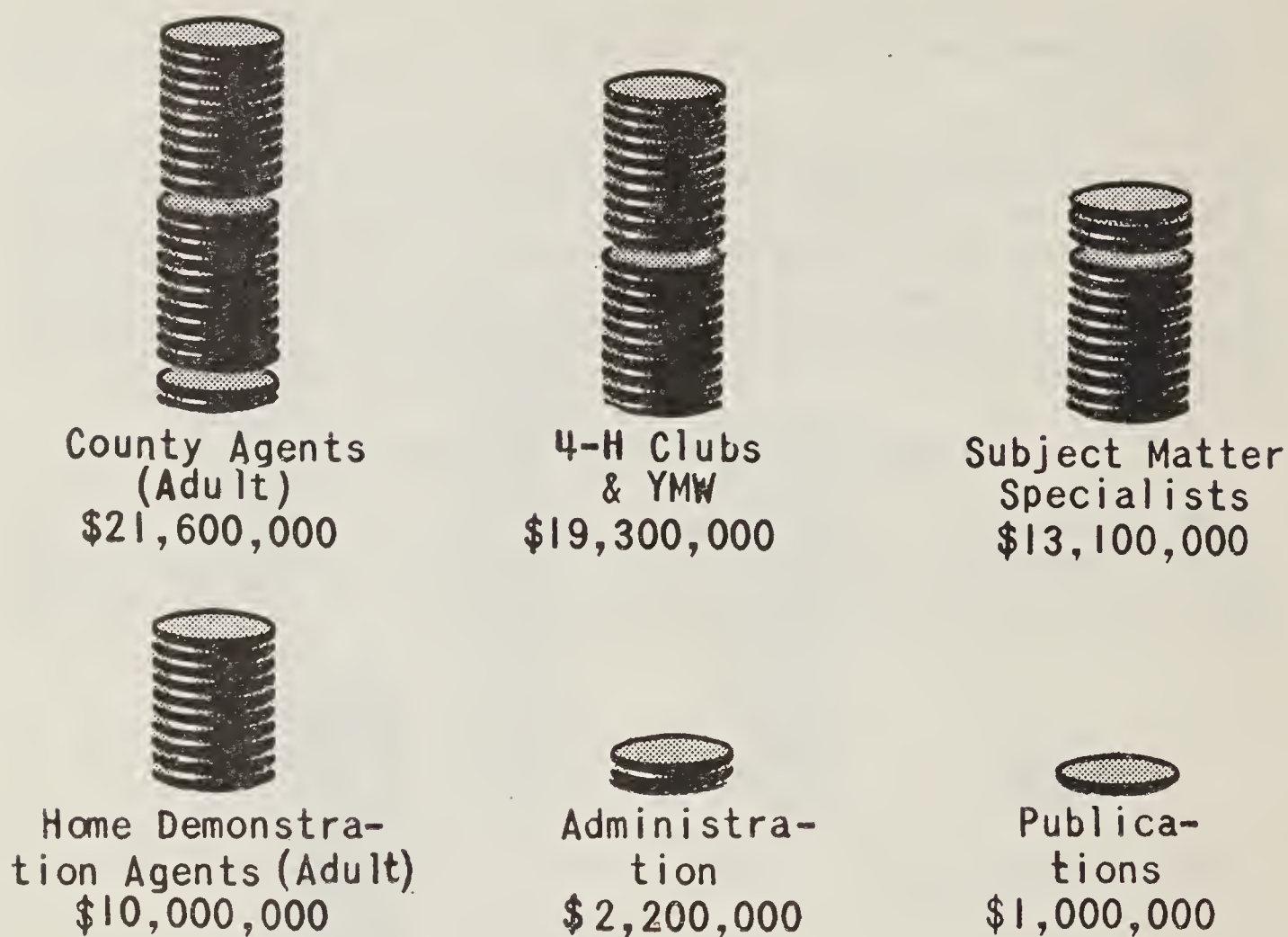


Figure 10.—Estimated expenditures from all sources for cooperative extension work, 1948-49.

This will eventually provide Puerto Rico with \$401,090 in additional Federal funds each year for further development of cooperative extension work. A companion bill signed by the President on October 27, 1949 (Public Law 417), authorized the extension to Alaska of the benefits of the Bankhead-Jones and Bankhead-Flannagan Acts and the full benefit of the Capper-Ketcham Act.

Public Law 392 of the Eighty-first Congress, approved October 26, 1949, amended the Clarke-McNary Act of June 7, 1924, by increasing the amount authorized to be appropriated annually for farm-forestry extension work under section 5 from \$100,000 to \$500,000.

The funds available from all sources for cooperative extension work for the fiscal year ending June 30, 1951, total approximately 77¼ million dollars, of which about 1¼ million dollars is for administration and coordination at the Federal level. Of this amount, 56.7 percent (\$43,808,791) is from State, county, and local sources, and 43.3 percent (\$33,425,000) is Federal funds. This is an increase of about 2½ million dollars over the amount available from State, county, and local sources during 1950.

Congress appropriated \$32,150 additional Federal funds for Alaska and \$71,348 additional funds for Puerto Rico for 1951, but reduced the appropriation for payments to States for farm-housing extension work under title V of the Housing Act of 1949 from \$122,000 to \$33,050.

No Federal funds were withheld from the States during 1950 for failure to comply with the requirements set down by Congress.



TABLE 1.—Number of counties with county extension agents, July 1, 1915, 1925, 1935, 1945, and 1950

State	Number of agricultural counties in State	Counties with agents on July 1—									
		1915		1925		1935		1945		1950	
		County agricultural agents	Home demonstration agents	County agricultural agents	Home demonstration agents	County agricultural agents	Home demonstration agents	County agricultural agents	Home demonstration agents	County agricultural agents	Home demonstration agents
Alabama.....	67	67	19	59	37	67	44	67	67	67	67
Arizona.....	14	3	—	12	9	11	6	12	9	12	<sup>1</sup> 10
Arkansas.....	75	52	20	50	39	75	72	75	75	75	75
California.....	54	11	—	43	22	43	25	43	32	49	42
Colorado.....	57	13	—	20	2	45	5	46	26	<sup>1</sup> 51	<sup>1</sup> 31
Connecticut.....	8	6	—	8	7	8	8	8	8	8	8
Delaware.....	3	3	—	3	—	3	3	3	3	3	3
Florida.....	63	36	27	36	30	44	29	61	40	61	46
Georgia.....	158	81	48	121	61	155	80	140	114	150	125
Idaho.....	44	3	—	16	27	31	37	33	44	41	19
Illinois.....	102	18	—	95	21	97	39	102	82	<sup>1</sup> 101	<sup>1</sup> 98
Indiana.....	92	31	—	79	1	91	12	92	58	92	70
Iowa.....	99	11	—	99	15	99	35	97	74	99	75
Kansas.....	105	39	—	63	15	100	27	99	52	105	<sup>1</sup> 86
Kentucky.....	120	39	19	72	24	114	29	116	76	120	90
Louisiana.....	64	43	13	48	24	62	52	64	64	64	64
Maine.....	16	3	—	16	15	16	15	16	16	<sup>1</sup> 15	<sup>1</sup> 16
Maryland.....	23	13	6	23	19	23	23	23	23	23	21
Massachusetts.....	12	10	—	11	11	11	10	11	11	11	11
Michigan.....	83	17	—	57	5	73	5	82	46	<sup>1</sup> 83	<sup>1</sup> 67
Minnesota.....	87	23	—	58	8	86	11	87	38	87	57
Mississippi.....	82	49	33	54	44	79	69	82	77	82	80
Missouri.....	114	15	—	50	9	114	14	111	93	114	102
Montana.....	56	8	—	23	6	40	8	46	19	<sup>1</sup> 50	23
Nebraska.....	93	8	—	43	2	93	14	86	32	<sup>1</sup> 85	46
Nevada.....	16	—	—	8	9	14	6	15	10	<sup>1</sup> 15	<sup>1</sup> 8
New Hampshire.....	10	5	—	10	8	10	10	10	10	10	10
New Jersey.....	20	7	—	18	11	19	15	20	18	20	19
New Mexico.....	31	8	—	21	5	24	10	30	14	30	17
New York.....	56	29	—	55	38	51	37	56	51	56	53
North Carolina.....	100	64	34	74	49	97	53	100	100	100	100
North Dakota.....	53	15	—	33	1	53	4	44	8	50	19
Ohio.....	88	10	—	85	15	84	22	86	64	88	77
Oklahoma.....	77	56	24	65	44	77	68	77	77	77	77
Oregon.....	36	12	—	28	3	34	6	36	23	36	28
Pennsylvania.....	67	14	—	63	28	65	63	66	66	67	66
Rhode Island.....	5	—	—	5	2	5	5	5	5	<sup>1</sup> 5	<sup>1</sup> 5
South Carolina.....	46	43	24	40	38	46	46	46	46	46	46
South Dakota.....	67	5	—	34	32	69	27	48	27	57	<sup>1</sup> 42
Tennessee.....	95	38	24	50	26	95	42	94	77	95	93
Texas.....	254	99	27	155	88	235	151	244	202	<sup>1</sup> 252	<sup>1</sup> 195
Utah.....	29	10	—	18	11	21	8	27	13	28	20
Vermont.....	14	9	—	12	7	14	11	14	12	14	13
Virginia.....	99	55	22	65	35	93	42	99	82	<sup>1</sup> 99	<sup>1</sup> 90
Washington.....	39	10	—	26	5	38	8	37	25	39	33
West Virginia.....	55	27	10	36	15	44	27	52	38	49	39
Wisconsin.....	71	12	—	48	1	65	7	68	48	71	65
Wyoming.....	23	6	—	16	5	20	7	20	12	22	18
Alaska.....	4	—	—	—	—	—	—	4	4	1	2
Hawaii.....	5	—	—	—	—	4	4	5	5	4	4
Puerto Rico.....	56	—	—	—	—	—	—	36	31	56	56
Total.....	3, 107	1, 136	350	2, 124	929	2, 857	1, 351	2, 941	2, 247	3, 035	2, 527

<sup>1</sup> Some agents cover two or more counties.

TABLE 2.—Number of extension workers, June 30, 1950

State or Territory	Number of agricultural counties	Directors and assistant directors	County agent work						Home demonstration work						Boys' and girls' club work <sup>1</sup>						Total
			White			Negro			White			Negro			White			Negro			
			State leaders	Assistant State leaders and district agents	County agents	State leaders	Assistant State leaders and district agents	County agents	State leaders	Assistant State leaders and district agents	County agents	State leaders	Assistant State leaders and district agents	County agents	State leaders	Assistant State leaders and district agents	County agents				
EASTERN REGION			8	2	1	1	8	7	4	1	1	2	9	7	2	2	25				
Connecticut	3	1	1	3	2	1	1	3	1	1	1	1	1	1	1	12					
Delaware	16	2	1	12	5	14	3	14	3	14	3	14	3	1	1	17					
Maine	23	3	1	23	19	19	2	19	13	5	2	2	14	1	1	75					
Maryland					6																
Massachusetts	12	1	1	11	17	11		11	15			4	13		2	31					
New Hampshire	10	2		10	9	9		9				1	4		1	16					
New Jersey	20	2	2	20	9	20		20	6			1	1		1	28					
New York	56	1	1	56	71	53	4	53	53			1	5	54	1	144					
Pennsylvania	67	5		67	47	65	3	65	9			1	7		2	275					
Rhode Island	5	1		3		3		3	1			1			1	29					
Vermont	14	2	1	14		12		12				1	1	13		19					
West Virginia	55	1		49	5	39	2	39		7		2	2	37	5	64					
Region total	289	23	9	276	191	256	11	105	13	80	14	25	173	80	5	1,707					
SOUTHERN REGION																					
Alabama	67	1	1	67	122	66	4	57	36	2	2	1	2	2	2	35					
Arkansas	75	3		79	46	78	4	11	25	1	1	1	1	1	1	35					
Florida	63	2		60	30	46	3	10	11	1	1	2	2	1	25						
Georgia	158	2		150	50	119	6	28	30	1	1	4	4	1	46						
Kentucky	120	2	1	120	40	89	6	4	6	1	10				1	337					
Louisiana	64	2		64	74	63	4	43	22	1	3	1	3		6	349					
Mississippi	82	2		82	87	80	7	31	60	2	3	1	3	2	1	49					
North Carolina	100	3		100	145	100	7	76	54	3	6	1	6	1	1	62					
Oklahoma	77	2		78	65	78	5	32	14	1	1	1	3		5	339					



South Carolina	46	2			3	46	54	1	33	1	4	46	27	1	1	29	2	4					4	48	307
Tennessee	95	3			6	95	108	1	12	1	5	92	37		1	11	1	3				3	49	428	
Texas	254	3			15	245	91	1	55	1	14	174	50	1	2	45	1	3				2	62	767	
Virginia	99	4			6	97	57	1	30		7	85	17		1	30	2	2				2	64	406	
Puerto Rico	56	3	1		4	54	25				4	55	13				1	2				3	33	198	
Region total	1,356	34	3		80	1,337	994	8	19	370	9	1,171	436	2	18	373	17	46			7	39	629	5,673	
NORTH CENTRAL REGION																									
Illinois	102	2			5	98	28				3	90	30				1	9	57	14		2	58	398	
Indiana	92	2			5	92	48				3	70	3				1	9	2	37		5	63	339	
Iowa	99	4			7	100	13				4	73	29				3	6	2	94		3	96	432	
Kansas	105	1			6	104	10				4	76	31				1	5	40	14		1	58	352	
Michigan	83	2	1		4	75	20				3	49	4				1	9	51	2		6	80	307	
Minnesota	87	3			3	90	5				3	58	3				1	9	63	11		1	38	289	
Missouri	114	3	1		5	114	99				5	101	16		3		1	5				2	41	397	
Nebraska	93	3			3	81	17				2	43	4				1	5				2	34	196	
North Dakota	53	1	1		4	50	10				1	18	1				1	5				1	23	117	
Ohio	88	3			5	88	47				4	75					1	5	3			1	54	287	
South Dakota	67	1	1		3	57	7				2	31					2	6				1	27	138	
Wisconsin	71	3			6	71	35				4	64	1				1	5	36			7	65	299	
Region total	1,054	28	4		56	1,020	339				9	748	122			3	15	78	381	41		32	637	3,551	
WESTERN REGION																									
Arizona	14	2				12	9					7	3				1	1					10	46	
California	54	2			6	49	163				4	42	35					5					39	346	
Colorado	57	2			2	46	5					29	3				1	2	17			1	26	135	
Idaho	44	2	1		3	41	3				1	18	3				1	1	10				19	104	
Montana	56	2			2	43	8					23	6				1	2					27	115	
Nevada	16	4				11	4					6											5	30	
New Mexico	31	3	1			30	25					16	11				1	2				5	16	111	
Oregon	36	5	1		1	37	28				2	27	3				1	4	21	8		1	38	178	
Utah	29	2			1	31	8					20					2					2	23	90	
Washington	39	3	1		2	40	52				3	32	7				1	3				2	23	169	
Wyoming	23	2	1			23	8					18	1				2					1	18	75	
Alaska	4	1				1					1	5	1				1							11	
Hawaii	5	2	1			9	23				1	10	14				1	1				2	14	79	
Region total	408	32	6		17	373	336				11	253	87				13	21	48	8		14	258	1,489	
Grand total	3,107	117	22		158	3,006	1,860	9	19	379	40	2,428	750	2	19	389	59	170	602	129	7	1	5	2,001	12,420
June 30, 1949	3,117	119	23		158	2,990	1,697	9	19	355	43	2,383	681	2	21	371	62	164	546	81	7	1	6	1,933	11,810

<sup>1</sup> These are special 4-H Club workers. In the majority of States, Alaska, Hawaii, and Puerto Rico, 4-H Club work is conducted by the county agricultural agents, the county home demonstration agents, and their assistants.

<sup>2</sup> Includes 31 part-time county 4-H Club agents in Indiana, and 64 part-time county 4-H Club agents in Iowa.

TABLE 3.—Expenditures of funds from all sources for cooperative agricultural extension work in States, Alaska, Hawaii, and Puerto Rico, for the fiscal year ended June 30, 1949, by sources of funds and totals for 1944-48

State	Grand total	Total Federal funds	Total within the States	Funds from Federal sources						Funds from within States			
				U. S. Department of Agriculture		Smith-Lever and Bankhead-Jones	Bankhead-Flannagan	Capper-Kercham	Additional cooperative	Research and marketing	State and college	County	Farmers' organizations, etc.
				Clarke-McNary	Norris-Doxey								
Alabama-----	\$2, 018, 110. 41	\$1, 179, 667. 64	\$838, 442. 77	-----	\$1, 620. 00	\$653, 787. 27	\$471, 505. 67	\$37, 220. 03	\$3, 724. 15	\$11, 810. 52	\$356, 656. 42	\$452, 251. 23	\$29, 535. 12
Arizona-----	335, 929. 27	176, 943. 27	158, 986. 00	-----	-----	94, 382. 75	59, 727. 30	22, 833. 22	-----	-----	99, 452. 43	59, 533. 57	-----
Arkansas-----	1, 482, 371. 27	938, 119. 53	544, 251. 74	-----	1, 620. 00	538, 543. 78	355, 653. 07	33, 217. 36	6, 949. 16	2, 136. 16	355, 042. 86	185, 527. 46	3, 681. 42
California-----	2, 614, 306. 80	688, 905. 43	1, 925, 401. 37	\$1, 620. 00	-----	414, 446. 82	235, 373. 81	37, 464. 80	-----	-----	1, 192, 297. 62	733, 103. 75	-----
Colorado-----	740, 064. 24	352, 275. 98	387, 788. 26	1, 085. 00	-----	158, 977. 29	138, 775. 39	24, 638. 47	27, 395. 83	1, 404. 00	154, 000. 00	230, 368. 82	3, 419. 44
Connecticut-----	503, 967. 17	174, 840. 04	329, 127. 13	1, 620. 00	-----	106, 959. 72	36, 699. 25	24, 799. 96	-----	4, 761. 11	229, 000. 01	66, 500. 00	33, 627. 12
Delaware-----	130, 820. 83	93, 713. 81	37, 107. 02	-----	-----	55, 616. 39	16, 990. 60	21, 106. 82	-----	-----	27, 599. 27	6, 854. 31	2, 653. 44
Florida-----	960, 030. 56	312, 322. 17	647, 708. 39	1, 620. 00	-----	187, 790. 02	95, 744. 18	25, 281. 53	-----	1, 886. 44	293, 227. 11	338, 683. 05	15, 798. 23
Georgia-----	2, 088, 106. 30	1, 167, 212. 16	920, 894. 14	1, 620. 00	1, 620. 00	667, 763. 36	426, 945. 22	37, 854. 95	26, 432. 70	4, 975. 93	464, 743. 68	450, 097. 64	6, 052. 82
Idaho-----	608, 243. 27	255, 326. 77	352, 916. 50	1, 620. 00	1, 260. 00	127, 709. 65	98, 259. 06	23, 032. 55	3, 445. 51	-----	204, 238. 29	148, 678. 21	-----
Illinois-----	2, 566, 940. 76	903, 531. 52	1, 663, 409. 24	1, 620. 00	1, 620. 00	531, 169. 12	319, 307. 97	38, 183. 11	10, 736. 90	894. 42	500, 535. 02	14, 003. 92	1, 148, 870. 30
Indiana-----	2, 091, 563. 88	728, 028. 57	1, 363, 535. 31	1, 620. 00	-----	433, 314. 14	257, 559. 37	33, 414. 27	-----	2, 120. 79	595, 387. 15	606, 033. 16	162, 115. 00
Iowa-----	2, 328, 522. 40	848, 052. 15	1, 480, 470. 25	1, 620. 00	1, 548. 00	468, 515. 29	307, 424. 10	32, 664. 80	28, 020. 63	8, 259. 33	399, 987. 48	433, 073. 41	647, 409. 36
Kansas-----	1, 804, 450. 40	615, 828. 15	1, 188, 622. 25	-----	-----	323, 026. 48	209, 952. 73	29, 120. 21	50, 228. 73	3, 500. 00	197, 073. 75	979, 048. 50	12, 500. 00
Kentucky-----	1, 798, 131. 42	1, 112, 250. 18	685, 881. 24	1, 620. 00	-----	625, 981. 53	442, 727. 15	37, 387. 96	-----	4, 533. 54	354, 108. 55	331, 772. 69	-----
Louisiana-----	1, 721, 688. 34	780, 177. 19	941, 511. 15	1, 620. 00	-----	435, 848. 30	299, 805. 24	32, 049. 90	-----	10, 853. 75	769, 373. 25	167, 955. 90	4, 182. 00
Maine-----	408, 807. 89	230, 454. 12	178, 353. 77	1, 620. 00	-----	129, 431. 86	66, 886. 10	24, 391. 36	2, 216. 53	5, 908. 27	117, 773. 83	43, 719. 65	16, 860. 29
Maryland-----	923, 324. 37	304, 147. 32	619, 177. 05	-----	1, 620. 00	171, 298. 96	86, 233. 56	26, 453. 25	-----	18, 541. 55	547, 469. 05	71, 708. 00	-----
Massachusetts-----	828, 763. 07	194, 640. 26	634, 122. 81	1, 620. 00	-----	115, 479. 88	45, 534. 86	23, 982. 65	-----	8, 022. 87	240, 971. 45	393, 151. 36	-----
Michigan-----	1, 648, 448. 50	831, 121. 61	817, 326. 89	1, 620. 00	1, 620. 00	471, 836. 40	305, 732. 54	35, 688. 96	-----	14, 623. 71	649, 325. 82	168, 001. 07	-----
Minnesota-----	1, 487, 575. 33	825, 458. 68	662, 116. 65	1, 620. 00	1, 620. 00	458, 982. 90	317, 388. 55	32, 213. 31	-----	13, 633. 92	239, 167. 72	384, 781. 05	38, 167. 88
Mississippi-----	2, 144, 138. 23	1, 208, 109. 36	936, 028. 87	1, 620. 00	1, 620. 00	659, 454. 04	492, 616. 45	35, 250. 62	-----	17, 548. 25	453, 482. 64	409, 390. 12	73, 156. 11
Missouri-----	1, 977, 531. 80	1, 006, 610. 76	970, 921. 04	-----	1, 620. 00	564, 917. 54	395, 111. 09	35, 886. 93	1, 686. 98	7, 388. 22	346, 499. 98	453, 555. 21	170, 865. 85
Montana-----	678, 534. 45	269, 419. 87	409, 114. 58	1, 350. 00	-----	118, 162. 50	94, 659. 21	23, 030. 42	32, 217. 74	-----	156, 088. 62	253, 025. 96	-----
Nebraska-----	1, 054, 200. 96	524, 969. 26	529, 231. 70	1, 620. 00	-----	266, 393. 57	174, 915. 56	26, 982. 76	49, 781. 81	5, 275. 56	268, 773. 03	260, 458. 67	-----
Nevada-----	210, 029. 95	114, 800. 70	95, 229. 25	-----	1, 200. 00	40, 493. 58	40, 568. 85	20, 583. 19	11, 955. 08	-----	43, 471. 12	51, 758. 13	-----
New Hampshire-----	348, 327. 98	128, 305. 91	220, 022. 07	1, 620. 00	-----	70, 238. 64	26, 745. 59	21, 814. 30	1, 134. 54	6, 752. 84	123, 240. 78	96, 781. 29	-----
New Jersey-----	754, 931. 72	222, 874. 31	532, 057. 41	1, 620. 00	-----	136, 209. 13	50, 224. 94	26, 666. 64	8, 153. 60	-----	206, 888. 04	325, 169. 37	-----
New Mexico-----	577, 222. 90	262, 650. 94	314, 571. 96	-----	-----	119, 523. 81	107, 614. 94	23, 095. 71	-----	12, 416. 48	235, 606. 94	78, 965. 02	-----
New York-----	4, 475, 624. 93	774, 777. 81	3, 700, 847. 12	1, 620. 00	1, 620. 00	456, 338. 59	255, 774. 58	40, 126. 75	-----	19, 297. 89	1, 957, 190. 32	1, 705, 494. 30	38, 162. 50



North Carolina	3,388,047.88	1,439,022.03	1,949,025.85	1,620.00	-----	812,167.22	582,610.80	42,624.01	-----	-----	1,013,958.08	935,067.77	-----
North Dakota	673,295.46	397,404.48	275,890.98	1,620.00	-----	184,332.97	144,835.76	24,442.25	3,467.97	-----	74,505.46	201,385.52	-----
Ohio	1,813,413.97	994,803.42	818,610.55	1,620.00	-----	579,709.14	373,487.88	39,986.40	-----	-----	423,979.14	394,631.41	-----
Oklahoma	1,551,142.39	891,154.23	659,988.16	-----	1,620.00	468,568.12	326,649.95	32,688.61	10,282.57	-----	429,785.25	230,202.91	-----
Oregon	1,263,304.35	323,426.92	939,877.43	1,620.00	-----	162,916.56	133,842.55	24,860.31	187.50	-----	668,261.44	271,615.99	-----
Pennsylvania	1,624,554.70	882,901.77	741,652.93	1,620.00	-----	595,926.62	231,235.99	48,859.18	5,259.98	-----	641,652.93	100,000.00	-----
Rhode Island	125,541.62	66,145.17	59,396.45	-----	-----	38,927.63	6,076.51	20,522.28	618.75	-----	40,940.12	14,450.00	4,006.33
South Carolina	1,491,248.64	827,701.04	663,547.60	1,620.00	-----	461,957.51	321,804.68	32,487.60	5,859.03	-----	586,696.15	67,651.45	9,200.00
South Dakota	637,863.36	407,156.78	230,706.58	-----	1,620.00	175,125.28	142,893.50	24,223.30	3,454.83	-----	138,342.49	92,364.09	-----
Tennessee	1,800,077.75	1,113,828.12	686,249.63	1,620.00	-----	623,494.36	447,832.57	36,450.19	4,431.00	-----	371,535.77	309,683.86	5,030.00
Texas	3,358,138.70	1,897,890.52	1,460,248.18	1,620.00	-----	1,047,330.01	713,610.81	50,515.24	2,575.67	-----	520,543.44	934,319.25	5,385.49
Utah	465,077.01	203,425.32	261,651.69	1,050.00	-----	85,130.44	76,513.83	22,132.38	4,991.25	-----	184,087.69	77,564.00	-----
Vermont	336,149.03	164,679.86	171,469.17	1,299.96	-----	85,171.59	49,048.99	22,055.51	1,650.00	-----	105,164.11	66,305.06	-----
Virginia	1,767,685.91	845,544.81	922,141.10	1,620.00	-----	508,488.49	293,584.69	35,095.44	5,878.69	-----	648,088.69	274,052.41	-----
Washington	976,124.78	403,796.87	572,327.91	1,620.00	877.50	210,589.28	159,508.66	27,091.95	4,986.98	-----	291,847.47	280,480.44	-----
West Virginia	915,579.71	540,851.21	374,728.50	-----	1,620.00	319,286.65	186,547.80	31,910.51	1,486.25	-----	255,273.17	119,455.33	-----
Wisconsin	1,836,802.74	770,893.60	1,065,909.14	1,620.00	-----	451,633.76	266,850.13	32,703.17	15,251.61	-----	366,785.85	649,123.29	50,000.00
Wyoming	477,333.59	182,983.20	294,350.39	1,260.00	-----	67,441.38	70,590.99	21,368.92	2,750.00	-----	196,676.39	97,674.00	-----
Alaska	49,083.62	23,950.00	25,133.62	-----	-----	13,950.00	-----	10,000.00	-----	-----	25,133.62	-----	-----
Hawaii	481,381.18	177,711.78	303,669.40	-----	-----	88,094.83	45,640.53	21,385.77	6,000.00	-----	303,669.40	-----	-----
Puerto Rico	899,905.28	522,731.04	377,174.24	1,431.00	-----	511,314.73	-----	-----	9,985.31	-----	377,174.24	-----	-----
Total	67,242,461.07	30,303,537.64	36,938,923.43	56,075.96	29,185.50	17,094,149.88	10,805,623.55	1,487,839.81	275,662.94	19,442,773.13	15,015,471.60	2,480,678.70	-----
1948 <sup>1</sup>	60,207,189.89	26,967,557.20	33,239,632.69	55,432.71	29,892.00	16,953,927.52	7,883,788.53	1,489,516.44	555,000.00	17,557,809.96	13,535,228.33	2,146,594.40	-----
1947 <sup>1</sup>	53,722,420.26	26,154,356.82	27,568,063.44	51,692.17	28,196.00	16,812,763.58	7,217,296.13	1,489,408.94	555,000.00	13,815,549.25	11,857,666.04	1,894,848.15	-----
1946 <sup>1</sup>	44,570,306.10	22,576,671.18	21,993,634.92	53,341.58	23,403.43	16,756,606.54	3,703,848.95	1,486,280.19	553,190.49	10,752,505.45	9,857,851.23	1,383,278.24	-----
1945 <sup>1</sup>	38,171,919.65	18,779,197.58	19,392,722.07	49,416.00	20,368.44	16,676,879.43	-----	1,484,519.30	548,014.41	8,965,253.00	9,117,304.33	1,310,164.74	-----
1944 <sup>1</sup>	36,344,028.66	18,782,976.75	17,561,051.91	47,709.68	19,661.26	16,678,434.72	-----	1,485,908.29	551,262.80	8,127,065.77	8,266,940.04	1,167,046.10	-----

<sup>1</sup> Farm labor and research-and-marketing funds not included.

TABLE 4.—Expenditures of funds from all sources for cooperative extension work for fiscal year 1948-49 for States, Alaska, Hawaii, and Puerto Rico

State	Administration		Printing and distribution of publications		Specialists		County agent work				Home demonstration work			
	Administration		Printing and distribution of publications		Specialists		Leadership		County		Leadership		County	
	Dollars	Per-cent	Dollars	Per-cent	Dollars	Per-cent	Dollars	Per-cent	Dollars	Per-cent	Dollars	Per-cent	Dollars	Per-cent
Connecticut-----	13,666.60	2.7	1,633.04	0.3	169,098.91	33.6	5,264.45	1.0	123,918.22	24.6	11,697.91	2.3	81,603.39	16.2
Delaware-----	13,492.79	10.3	1,431.25	1.1	42,662.07	32.6	4,199.11	3.2	26,559.55	20.3	3,854.89	2.9	16,226.95	12.4
Maine-----	38,867.32	9.5	4,208.99	1.0	96,783.45	23.7	6,385.49	1.6	100,319.58	24.5	10,491.59	2.6	88,581.29	21.7
Maryland-----	35,786.97	3.9	6,749.29	.7	421,904.63	45.7	31,979.26	3.5	205,866.70	22.3	28,889.96	3.1	137,964.82	14.9
Massachusetts-----	22,157.37	2.7	5,110.05	.6	262,634.97	31.7	9,064.04	1.1	209,278.17	25.3	12,864.96	1.5	121,124.92	14.6
New Hampshire-----	18,605.73	5.3	7,430.32	2.1	97,457.44	28.0	7,111.70	2.1	77,559.15	22.3	3,445.85	1.0	53,995.33	15.5
New Jersey-----	14,755.27	2.0	3,566.21	.5	159,433.06	21.1	20,196.55	2.7	263,297.71	34.9	11,702.99	1.5	146,466.71	19.4
New York-----	267,827.74	6.0	101,888.76	2.3	1,472,343.75	32.9	57,514.01	1.3	1,093,518.96	24.4	88,082.87	1.9	665,409.51	14.9
Pennsylvania-----	77,153.01	4.7	20,860.38	1.3	485,126.69	29.9	1,138.95	.1	643,881.35	39.7	26,174.64	1.6	322,291.40	19.8
Rhode Island-----	8,233.58	6.5	1,691.49	1.3	33,810.58	26.9	4,216.60	3.4	18,252.83	14.5	7,365.06	5.9	18,778.25	15.0
Vermont-----	13,982.11	4.2	5,502.74	1.6	85,258.43	25.4	9,734.51	2.9	76,357.20	22.7	9,910.25	2.9	60,015.28	17.9
West Virginia-----	32,551.40	3.6	11,396.97	1.2	142,461.49	15.6	29,699.26	3.2	315,744.98	34.5	22,267.75	2.4	148,603.66	16.2
Total-----	557,079.89	4.9	171,469.49	1.5	3,468,975.47	30.5	186,503.93	1.6	3,154,554.40	27.7	236,748.72	2.1	1,861,061.51	16.4
Alabama-----	47,455.62	2.4	34,112.09	1.7	318,237.58	15.8	73,355.83	3.6	931,595.37	46.2	59,185.86	2.9	519,408.86	25.7
Arkansas-----	63,176.35	4.3	16,754.80	1.1	178,163.89	12.0	59,008.31	4.0	605,266.68	40.8	58,420.80	3.9	485,401.54	32.8
Florida-----	35,338.13	3.7	10,724.43	1.1	128,319.25	13.4	23,025.10	2.4	451,569.10	47.1	30,010.60	3.1	254,684.80	26.5
Georgia-----	27,517.94	1.3	26,794.08	1.3	314,433.04	15.1	77,744.26	3.7	1,018,738.06	48.8	65,649.39	3.1	507,865.36	24.3
Kentucky-----	45,582.86	2.5	22,688.75	1.3	231,157.86	12.9	59,090.45	3.3	884,670.37	49.2	46,755.34	2.6	437,255.03	24.3
Louisiana-----	23,427.49	1.4	21,902.45	1.3	279,405.14	16.2	93,154.06	5.4	743,579.51	43.2	64,108.70	3.7	462,723.34	26.9
Mississippi-----	51,072.71	2.4	24,713.51	1.1	363,602.72	16.9	80,781.36	3.8	897,295.39	41.9	62,240.51	2.9	611,276.00	28.5
North Carolina-----	55,692.41	1.7	38,864.71	1.1	443,935.15	13.1	76,833.07	2.3	1,579,620.47	46.6	87,086.75	2.6	1,057,508.63	31.2
Oklahoma-----	28,281.35	1.8	33,524.41	2.2	272,138.44	17.5	54,024.89	3.5	613,080.40	39.5	58,180.97	3.8	462,014.19	29.8
South Carolina-----	67,688.19	4.5	23,629.95	1.6	312,327.39	20.9	48,471.91	3.3	597,631.23	40.1	58,292.74	3.9	365,591.07	24.5
Tennessee-----	41,566.00	2.3	19,341.82	1.1	313,322.05	17.4	86,067.32	4.8	737,035.30	40.9	54,202.11	3.0	506,673.94	28.2
Texas-----	77,847.55	2.3	41,467.84	1.2	357,129.76	10.6	182,807.54	5.4	1,606,957.72	47.9	150,245.56	4.5	928,848.27	27.7
Virginia-----	78,288.58	4.4	22,643.32	1.3	320,189.87	18.1	52,360.46	3.0	770,080.37	43.6	50,505.74	2.8	447,733.70	25.3
Total-----	642,935.18	2.5	337,162.16	1.3	3,832,362.14	15.0	966,724.56	3.8	11,437,119.97	44.7	844,885.07	3.3	7,046,984.73	27.6
Illinois-----	67,632.83	2.6	38,852.24	1.5	345,335.91	13.5	41,447.47	1.6	1,158,335.31	45.1	63,317.60	2.5	744,857.07	29.0
Indiana-----	52,052.64	2.5	66,102.66	3.2	400,816.39	19.1	43,864.18	2.1	907,600.13	43.4	20,340.67	1.0	304,229.19	14.6
Iowa-----	105,436.90	4.5	93,350.76	4.0	420,896.97	18.1	46,847.77	2.0	878,610.46	37.7	28,421.40	1.2	433,349.49	18.6
Kansas-----	37,890.79	2.1	12,188.15	.7	317,566.20	17.6	47,717.22	2.6	744,287.54	41.3	26,700.45	1.5	466,225.11	25.8
Michigan-----	50,926.37	3.1	49,294.18	3.0	500,359.55	30.4	39,742.60	2.4	551,193.05	33.5	38,688.39	2.3	171,695.36	10.4
Minnesota-----	42,411.81	2.9	18,273.83	1.2	273,007.60	18.4	38,389.85	2.6	629,089.44	42.3	30,410.51	2.0	232,278.12	15.6
Missouri-----	38,206.97	1.9	25,173.82	1.3	252,906.09	12.8	57,873.26	2.9	1,034,605.29	52.3	37,384.30	1.9	484,630.87	24.5
Nebraska-----	29,934.80	2.8	20,342.10	1.9	204,234.43	19.4	48,209.74	4.6	536,472.46	50.9	22,496.42	2.1	156,171.81	14.8



North Dakota.....	19, 172.22	2.9	3, 966.81	6	132, 625.21	19.7	44, 062.60	6.5	358, 830.64	53.3	17, 673.68	2.6	62, 869.13	9.3
Ohio.....	41, 084.56	2.3	24, 693.60	1.4	386, 526.91	21.3	50, 785.98	2.8	921, 050.48	50.8	35, 114.10	1.9	306, 413.89	16.9
South Dakota.....	15, 388.12	2.4	10, 154.92	1.6	125, 259.69	19.6	23, 898.12	3.8	261, 668.39	41.0	19, 578.57	3.1	141, 094.50	22.1
Wisconsin.....	41, 219.70	2.2	36, 201.06	2.0	452, 645.53	24.6	53, 270.96	2.9	734, 565.98	40.0	41, 980.70	2.3	330, 833.50	18.0
Total.....	541, 357.71	2.7	398, 594.13	2.0	3, 812, 180.48	19.1	536, 109.75	2.7	8, 716, 309.17	43.8	382, 106.79	1.9	3, 834, 648.04	19.2
Arizona.....	25, 442.56	7.6	6, 535.13	1.9	72, 881.39	21.7	6, 222.70	1.9	151, 847.71	45.2	7, 221.33	2.1	51, 486.83	15.3
California.....	18, 347.78	.7	8, 083.20	.3	323, 755.25	12.4	75, 284.91	2.9	1, 641, 740.28	62.8	28, 966.29	1.1	479, 802.60	18.4
Colorado.....	13, 638.11	1.9	12, 140.18	1.6	153, 152.20	20.7	41, 268.93	5.6	316, 075.00	42.7	9, 811.41	1.3	103, 578.11	14.0
Idaho.....	27, 492.60	4.5	10, 078.59	1.7	115, 733.49	19.0	26, 584.22	4.4	277, 916.79	45.7	16, 443.99	2.7	75, 363.40	12.4
Montana.....	36, 269.52	5.3	8, 348.46	1.2	137, 204.78	20.2	22, 229.63	3.3	296, 644.16	43.7	13, 029.40	1.9	134, 070.23	19.8
Nevada.....	15, 613.66	7.4	6, 787.71	.3	23, 041.37	11.0	12, 289.07	5.9	69, 204.84	32.9	9, 350.01	4.4	36, 731.87	17.5
New Mexico.....	21, 516.83	3.7	3, 709.86	.6	116, 979.57	20.3	18, 250.48	3.2	274, 862.21	47.6	8, 114.64	1.4	119, 511.82	20.7
Oregon.....	79, 255.05	6.3	21, 538.35	1.7	282, 336.78	22.4	28, 307.99	2.2	428, 369.21	33.9	23, 614.70	1.9	172, 385.62	13.6
Utah.....	47, 170.13	10.1	10, 495.74	2.3	90, 625.42	19.5	12, 854.70	2.8	179, 824.79	38.7	8, 493.05	1.8	101, 417.08	21.8
Washington.....	47, 823.05	4.9	23, 695.27	2.4	168, 402.43	17.3	40, 800.55	4.2	478, 093.29	49.0	33, 209.01	3.4	162, 698.39	16.6
Wyoming.....	21, 150.28	4.4	4, 060.31	.8	118, 638.36	24.9	17, 246.98	3.6	205, 194.98	43.0	13, 681.29	2.9	74, 940.65	15.7
Total.....	353, 719.57	4.0	109, 363.80	1.2	1, 602, 751.04	17.9	301, 340.16	3.4	4, 319, 773.26	48.3	171, 935.12	1.9	1, 511, 986.60	16.9
Alaska.....	13, 104.69	26.7	-----	-----	-----	-----	145.89	.3	9, 220.38	18.8	7, 736.72	15.8	18, 875.94	38.4
Hawaii.....	32, 271.78	6.7	1, 727.40	.3	107, 623.94	22.4	3, 231.28	.7	194, 151.22	40.3	5, 848.19	1.2	120, 829.29	25.1
Puerto Rico.....	58, 170.84	6.5	4, 573.26	.5	250, 713.51	27.8	51, 505.31	5.7	273, 150.34	30.4	38, 291.70	4.3	204, 544.89	22.7
Grand total.....	2, 198, 639.66	3.3	1, 022, 890.24	1.5	13, 074, 606.58	19.4	2, 045, 560.88	3.0	28, 104, 278.74	41.8	1, 687, 552.31	2.5	14, 598, 931.00	21.7

State	Boys' and girls' club work <sup>1</sup>				Total at college		Total in county		Miscellaneous		Totals	
	Leadership		County		Dollars	Per-cent	Dollars	Per-cent	Dollars	Per-cent	Dollars	Per-cent
	Dollars	Per-cent	Dollars	Per-cent								
Connecticut.....	22, 386.54	4.5	74, 698.11	14.8	223, 747.45	44.4	280, 219.72	55.6	-----	-----	503, 967.17	-----
Delaware.....	5, 183.93	4.0	17, 210.29	13.2	70, 824.04	54.1	59, 996.79	45.9	-----	-----	130, 820.83	-----
Maine.....	14, 037.29	3.4	49, 132.89	12.0	170, 774.13	41.8	238, 033.76	58.2	-----	-----	408, 807.89	-----
Maryland.....	24, 747.80	2.7	29, 434.94	3.2	550, 057.91	59.6	373, 266.46	40.4	-----	-----	923, 324.37	-----
Massachusetts.....	41, 445.55	5.0	145, 083.04	17.5	353, 276.94	42.6	475, 486.13	57.4	-----	-----	828, 763.07	-----
New Hampshire.....	11, 551.68	3.3	71, 170.78	20.4	145, 602.72	41.8	202, 725.26	58.2	-----	-----	348, 327.98	-----
New Jersey.....	16, 962.76	2.2	118, 550.46	15.7	226, 616.84	30.0	528, 314.88	70.0	-----	-----	754, 931.72	-----
New York.....	48, 321.03	1.1	680, 718.30	15.2	2, 035, 978.16	45.5	2, 439, 646.77	54.5	-----	-----	4, 475, 624.93	-----
Pennsylvania.....	47, 928.28	2.9	-----	-----	658, 381.95	40.5	966, 172.75	59.5	-----	-----	1, 624, 554.70	-----
Rhode Island.....	7, 624.12	6.1	25, 569.11	20.4	62, 941.43	50.1	62, 600.19	49.9	-----	-----	125, 541.62	-----
Vermont.....	15, 252.06	4.5	60, 136.45	17.9	139, 640.10	41.5	196, 508.93	58.5	-----	-----	336, 149.03	-----
West Virginia.....	75, 903.54	8.3	136, 950.66	15.0	314, 280.41	34.3	601, 299.30	65.7	-----	-----	915, 579.71	-----
Total.....	331, 344.58	2.9	1, 408, 655.03	12.4	4, 952, 122.08	43.5	6, 424, 270.94	56.5	-----	-----	11, 376, 393.02	-----

See footnotes at end of table.

TABLE 4.—Expenditures of funds from all sources for cooperative extension work for fiscal year 1948-49 for States, Alaska, Hawaii, and Puerto Rico—Continued

State	Boys' and girls' club work <sup>1</sup>				Total at college	Total in county		Miscellaneous		Totals
	Leadership		County			Dollars	Per- cent	Dollars	Per- cent	
	Dollars	Per- cent	Dollars	Per- cent						
Alabama.....	27,267.80	1.3	-----	559,614.78	27.7	1,451,004.23	71.9	1,451,004.23	71.9	2,018,110.41
Arkansas.....	16,178.90	1.1	-----	391,703.05	26.4	1,090,668.22	73.6	27,491.40	0.4	1,482,371.27
Florida.....	26,359.15	2.7	-----	253,776.66	26.4	706,253.90	73.6	-----	-----	960,030.56
Georgia.....	49,364.17	2.4	-----	561,502.88	26.9	1,526,603.42	73.1	-----	-----	2,088,106.30
Kentucky.....	70,930.76	3.9	-----	476,206.02	26.5	1,321,925.40	73.5	-----	-----	1,798,131.42
Louisiana.....	33,387.65	1.9	-----	515,335.49	29.9	1,206,302.85	70.1	-----	-----	1,721,688.34
Mississippi.....	53,156.03	2.5	-----	635,566.84	29.6	1,508,571.39	70.4	-----	-----	2,144,138.23
North Carolina.....	48,506.69	1.4	-----	750,918.78	22.2	2,637,129.10	77.8	-----	-----	3,388,047.88
Oklahoma.....	29,897.74	1.9	-----	476,047.80	30.7	1,075,094.59	69.3	-----	-----	1,551,142.39
South Carolina.....	17,616.16	1.2	-----	528,026.34	35.4	963,222.30	64.6	-----	-----	1,491,248.64
Tennessee.....	41,869.21	2.3	-----	556,368.51	30.9	1,243,709.24	69.1	-----	-----	1,800,077.75
Texas.....	12,834.46	.4	-----	822,332.71	24.5	2,535,805.99	75.5	-----	-----	3,358,138.70
Virginia.....	25,883.87	1.5	-----	549,871.84	31.1	1,217,814.07	68.9	-----	-----	1,767,685.91
Total.....	453,252.59	1.8	-----	7,077,321.70	27.7	18,484,104.70	72.3	7,491.40	-----	25,568,917.80
Illinois.....	107,162.33	4.2	-----	663,748.38	25.9	1,903,192.38	74.1	-----	-----	2,566,940.76
Indiana.....	59,643.54	2.8	-----	642,820.08	30.7	1,448,743.80	69.3	-----	-----	2,091,563.88
Iowa.....	50,929.04	2.2	-----	745,882.84	32.0	1,582,639.56	68.0	-----	-----	2,328,522.40
Kansas.....	46,664.13	2.6	-----	488,726.94	27.1	1,315,723.46	72.9	-----	-----	1,804,450.40
Michigan.....	79,803.76	4.8	-----	758,814.85	46.0	889,633.65	54.0	-----	-----	1,648,448.50
Minnesota.....	67,248.01	4.5	-----	469,741.61	31.6	1,017,833.72	68.4	-----	-----	1,487,575.33
Missouri.....	46,751.20	2.4	-----	458,295.64	23.2	1,519,236.16	76.8	-----	-----	1,977,531.80
Nebraska.....	36,339.20	3.5	-----	361,556.69	34.3	692,644.27	65.7	-----	-----	1,054,200.96
North Dakota.....	31,612.52	4.7	-----	249,113.04	37.0	424,182.42	63.0	-----	-----	673,295.46
Ohio.....	37,859.66	2.1	.5	576,064.81	31.8	1,237,349.16	68.2	-----	-----	1,813,413.97
South Dakota.....	40,821.05	6.4	-----	235,100.47	36.9	402,762.89	63.1	-----	-----	637,863.36
Wisconsin.....	43,244.58	2.4	5.6	668,562.53	36.4	1,168,240.21	63.6	-----	-----	1,836,802.74
Total.....	648,079.02	3.3	5.3	6,318,427.88	31.7	13,602,181.68	68.3	-----	-----	19,920,609.56
Arizona.....	14,291.62	4.3	-----	132,594.73	39.5	203,334.54	60.5	-----	-----	335,929.27
California.....	38,326.49	1.4	-----	492,763.92	18.8	2,121,542.88	81.2	-----	-----	2,614,306.80
Colorado.....	23,025.77	3.1	9.1	253,036.60	34.2	487,027.64	65.8	-----	-----	740,064.24
Idaho.....	13,665.39	2.2	7.4	209,998.28	34.5	398,244.99	65.5	-----	-----	608,243.27
Montana.....	22,073.75	3.3	-----	239,155.54	35.2	430,714.39	63.5	28,664.52	1.3	678,534.45
Nevada.....	8,954.06	4.3	16.3	69,926.88	33.3	140,103.07	66.7	-----	-----	210,029.95
New Mexico.....	14,277.49	2.5	-----	182,848.87	31.7	394,374.03	68.3	-----	-----	577,222.90
Oregon.....	59,640.50	4.7	10.5	494,693.37	39.2	732,985.29	58.0	235,625.69	2.8	1,263,304.35
Utah.....	14,196.10	3.0	-----	183,835.14	39.5	281,241.87	60.5	-----	-----	465,077.01



Washington	21,402.79	2.2		335,333.10	34.4	640,791.68	65.6		976,124.78
Wyoming	22,420.74	4.7		197,197.96	41.3	280,135.63	58.7		477,333.59
Total	252,274.70	2.8	278,736.15	3.1	2,791,384.39	31.2	6,110,496.01	68.3	8,946,170.61
Alaska									
Hawaii	15,698.08	3.3			20,987.30	42.8	28,096.32	57.2	49,083.62
Puerto Rico	18,955.43	2.1			166,400.67	34.6	314,980.51	65.4	481,381.18
Grand total	1,719,604.40	2.6	2,738,615.65	4.1	21,748,854.07	32.3	45,441,825.39	67.6	67,242,461.07

<sup>1</sup> Does not include cost of extension workers who devoted part-time to 4-H Club work. Estimated total expended for 4-H Club work, \$21,300,000.  
<sup>2</sup> Retirement.

TABLE 5.—Unexpended balances of Federal extension funds for the fiscal year ended June 30, 1949

State	Bankhead-Jones	Capper-Ketcham	Bankhead-Flannagan	Total	State	Bankhead-Jones	Capper-Ketcham	Bankhead-Flannagan	Total
Alabama	\$284.67		\$24.17	\$308.84	North Dakota	\$1.85		\$10,298.78	\$10,300.63
Arizona	27.42		5,453.22	5,480.64	Ohio	5,712.92		8,718.17	14,431.09
Arkansas			35,135.86	35,135.86	Pennsylvania			89,932.53	89,932.53
Connecticut	160.27		97.55	257.82	Rhode Island	1,584.56			1,584.56
Florida	12,855.80	\$2,136.19	16,419.78	31,411.77	Texas	9,365.89		44,565.40	53,931.29
Georgia					Utah			229.60	229.60
Idaho	347.44		53,202.59	53,550.03	Vermont			352.37	352.37
Illinois			14,863.63	14,863.63	Virginia			52,738.08	52,738.08
Indiana	267.26		24,367.65	24,367.65	Washington	9.10			9.10
Iowa			29,065.94	29,333.20	West Virginia		\$2.13	443.19	445.32
			19,365.58	19,365.58	Wisconsin			43,132.60	43,132.60
Kansas		.01	3,133.76	3,133.77	Puerto Rico	.46			.46
Massachusetts			6,149.17	6,301.51	Total	32,510.18	2,160.19	462,226.45	496,896.82
Minnesota	152.34		3,713.26	3,713.26					
Montana			150.00	150.00					
New York	1,740.20	21.86	673.57	2,435.63					

TABLE 6.—Sources of funds allotted for cooperative extension work in States, Alaska, Hawaii, and Puerto Rico for the fiscal year ending June 30, 1951

State	Grand total	Total Federal funds	Total within the States	Funds from Federal sources			
				Smith-Lever	Bankhead-Jones, Section 21, Title II	Bankhead-Jones, Section 23, Title II	Capper-Ketcham
Alabama-----	\$2, 431, 789. 77	\$1, 230, 457. 10	\$1, 201, 332. 67	\$151, 596. 66	\$502, 475. 28	\$514, 435. 98	\$37, 220. 03
Arizona-----	396, 653. 07	186, 720. 07	209, 933. 00	33, 296. 96	61, 113. 21	68, 836. 68	22, 833. 22
Arkansas-----	1, 707, 360. 48	1, 012, 063. 48	695, 297. 00	118, 683. 61	419, 860. 17	426, 348. 18	33, 217. 36
California-----	3, 259, 531. 00	710, 962. 92	2, 548, 568. 08	153, 609. 36	260, 837. 46	256, 791. 30	37, 464. 80
Colorado-----	885, 754. 31	362, 514. 96	523, 239. 35	48, 141. 19	110, 836. 10	141, 853. 37	24, 638. 47
Connecticut-----	527, 840. 02	180, 855. 02	346, 985. 00	49, 469. 04	57, 650. 95	40, 145. 07	24, 799. 96
Delaware-----	167, 622. 50	103, 547. 50	64, 075. 00	19, 101. 13	36, 515. 26	18, 459. 29	21, 106. 82
Florida-----	1, 274, 376. 11	353, 738. 72	920, 637. 39	70, 994. 31	129, 651. 51	121, 915. 18	27, 417. 72
Georgia-----	2, 208, 059. 73	1, 269, 867. 73	938, 192. 00	156, 817. 49	511, 293. 31	523, 838. 15	37, 854. 95
Idaho-----	722, 604. 10	277, 302. 10	445, 302. 00	34, 936. 02	92, 773. 63	119, 594. 39	23, 032. 55
Illinois-----	2, 626, 082. 87	964, 117. 00	1, 661, 965. 87	159, 515. 89	371, 653. 23	374, 947. 87	38, 183. 11
Indiana-----	2, 059, 463. 02	799, 462. 02	1, 260, 001. 00	120, 302. 76	313, 278. 64	312, 706. 35	33, 414. 27
Iowa-----	2, 446, 525. 13	905, 506. 13	1, 541, 019. 00	114, 139. 96	354, 375. 33	356, 525. 41	32, 664. 80
Kansas-----	2, 474, 286. 43	649, 011. 40	1, 825, 275. 03	84, 993. 69	238, 032. 79	232, 475. 97	29, 120. 22
Kentucky-----	1, 860, 976. 76	1, 155, 636. 76	705, 340. 00	152, 977. 52	473, 004. 01	483, 012. 44	37, 387. 96
Louisiana-----	2, 014, 356. 56	806, 703. 77	1, 207, 652. 79	109, 083. 79	326, 764. 51	327, 085. 57	32, 049. 90
Maine-----	424, 187. 38	235, 800. 31	188, 387. 07	46, 109. 22	83, 322. 64	72, 517. 33	24, 391. 36
Maryland-----	1, 079, 447. 37	317, 681. 12	761, 766. 25	63, 063. 69	108, 235. 27	94, 080. 25	26, 453. 25
Massachusetts-----	980, 952. 81	208, 621. 82	772, 330. 99	42, 748. 46	72, 883. 76	56, 386. 95	23, 982. 65
Michigan-----	2, 076, 065. 42	871, 242. 22	1, 204, 823. 20	139, 007. 00	332, 829. 40	333, 552. 22	35, 688. 96
Minnesota-----	1, 653, 422. 97	855, 181. 20	798, 241. 77	110, 427. 47	348, 555. 43	350, 319. 99	32, 213. 31
Mississippi-----	2, 317, 190. 95	1, 262, 059. 95	1, 055, 131. 00	135, 402. 66	524, 051. 38	537, 441. 35	35, 250. 62
Missouri-----	1, 954, 241. 47	1, 036, 590. 33	917, 651. 14	140, 634. 88	424, 282. 66	431, 063. 63	35, 886. 93
Montana-----	825, 067. 11	288, 544. 11	536, 523. 00	34, 918. 54	83, 243. 96	107, 433. 45	23, 030. 42
Nebraska-----	1, 149, 032. 61	552, 644. 51	596, 388. 10	67, 417. 76	198, 975. 81	200, 831. 74	26, 982. 76
Nevada-----	255, 590. 92	117, 947. 43	137, 643. 49	14, 795. 47	25, 698. 11	43, 075. 58	20, 583. 19
New Hampshire-----	378, 618. 89	130, 223. 73	248, 395. 16	24, 918. 64	45, 320. 00	28, 997. 28	21, 814. 30
New Jersey-----	906, 316. 79	228, 084. 45	678, 232. 34	64, 818. 34	71, 390. 79	54, 795. 08	26, 666. 64
New Mexico-----	777, 938. 62	275, 722. 01	502, 216. 61	35, 455. 41	84, 068. 40	111, 312. 49	23, 095. 71
New York-----	3, 870, 620. 66	794, 900. 66	3, 075, 720. 00	175, 677. 81	282, 400. 98	279, 783. 26	40, 148. 61



North Carolina-----	1, 493, 075.82	2, 272, 946.00	196, 032.50	616, 134.72	635, 624.59	42, 624.01
North Dakota-----	421, 464.64	411, 997.56	46, 527.70	137, 807.12	162, 611.04	24, 442.25
Ohio-----	1, 048, 652.78	853, 270.29	174, 344.00	411, 078.06	416, 984.32	39, 986.40
Oklahoma-----	938, 173.84	934, 095.00	114, 335.77	354, 232.35	356, 372.97	32, 688.61
Oregon-----	1, 872, 268.84	1, 191, 831.54	49, 965.31	112, 951.25	137, 108.63	24, 860.31
Pennsylvania-----	1, 529, 167.04	1, 008, 612.80	247, 302.93	348, 623.69	350, 392.77	48, 859.18
	2, 012, 715.37					
Rhode Island-----	151, 325.61	81, 489.00	14, 294.63	26, 217.56	6, 629.43	20, 522.28
South Carolina-----	1, 557, 084.77	696, 450.63	112, 682.90	349, 274.61	351, 086.81	32, 487.60
South Dakota-----	853, 966.60	437, 365.38	44, 727.29	130, 397.99	150, 711.11	24, 223.30
Tennessee-----	2, 040, 340.31	880, 507.00	145, 266.42	478, 227.94	488, 582.42	36, 450.19
Texas-----	4, 006, 421.51	1, 977, 586.26	260, 920.43	795, 775.47	827, 165.32	50, 515.24
Utah-----	506, 843.09	291, 021.00	27, 534.10	57, 596.34	80, 086.85	22, 132.38
Vermont-----	362, 605.55	193, 180.00	26, 902.05	58, 269.54	52, 804.64	22, 055.51
Virginia-----	2, 260, 050.32	1, 328, 787.00	134, 126.66	374, 361.83	377, 835.89	35, 095.44
Washington-----	1, 425, 125.33	1, 016, 561.22	68, 315.60	142, 282.78	160, 383.18	27, 091.95
West Virginia-----	1, 035, 405.25	473, 950.00	107, 955.11	211, 331.54	204, 005.96	31, 912.64
Wisconsin-----	1, 868, 327.83	1, 022, 879.83	114, 455.52	337, 178.24	338, 189.14	32, 703.17
Wyoming-----	541, 813.26	355, 276.44	21, 256.35	46, 185.03	72, 919.61	21, 363.92
Alaska-----	114, 240.00	57, 500.00	13, 950.00	20, 808.00	862.00	20, 480.00
Hawaii-----	540, 098.18	350, 153.91	21, 394.87	66, 699.96	49, 793.52	21, 385.77
Puerto Rico-----	1, 019, 738.00	405, 064.81	103, 315.19	408, 000.00	40, 000.00	31, 348.00
Unallotted-----	72, 259.25				10, 150.00	
Grand total-----	75, 983, 179.03	43, 808, 790.97	4, 718, 660.06	12, 428, 808.00	12, 290, 862.00	1, 531, 828.00

TABLE 6.—Sources of funds allotted for cooperative extension work in States, Alaska, Hawaii, and Puerto Rico for the fiscal year ending June 30, 1951—Continued

State	Funds from Federal sources					Funds from within the States		
	Additional cooperative	Clarke-McNary	Norris-Doxey	Farm Housing, Title V Housing Act of 1949 <sup>1</sup>	Research and Marketing Act, Title II Sec. 204 (b) <sup>2</sup>	State and college	County	Farmers' organizations, etc.
Alabama	\$3,724.15		\$1,620	\$640	\$18,745.00	\$691,332.67	\$510,000.00	
Arizona				640		174,659.00	35,274.00	
Arkansas	6,949.16		1,620	640	4,745.00	470,000.00	225,297.00	
California		\$1,620		640		1,672,437.08	866,131.00	\$10,000.00
Colorado	27,395.83	1,260		640	7,750.00	230,363.00	291,710.85	1,165.50
Connecticut		1,620		640	6,530.00	262,145.00	66,000.00	18,840.00
Delaware				640	7,725.00	58,200.00	5,000.00	875.00
Florida		1,620		640	1,500.00	557,241.39	363,396.00	
Georgia	26,432.70	1,620	1,620	640	9,751.13	435,000.00	496,892.00	6,300.00
Idaho	3,445.51	1,620	1,260	640		303,782.00	141,520.00	
Illinois	10,736.90	1,620	1,620	640	5,200.00	633,018.00	10,000.00	1,018,947.87
Indiana		1,620		640	17,500.00	701,925.00	558,076.00	
Iowa	28,020.63	1,620	1,620	640	15,900.00	736,000.00	343,019.00	462,000.00
Kansas	50,228.73		1,620	640	11,900.00	340,268.00	1,222,599.03	262,408.00
Kentucky		1,620		640	6,994.83	430,340.00	275,000.00	
Louisiana		1,620		640	9,460.00	1,026,628.89	176,991.90	4,032.00
Maine	2,216.53	1,620		640	4,983.23	134,387.07	54,000.00	
Maryland			1,620	640	23,588.66	569,362.25	192,404.00	
Massachusetts		1,620		640	10,360.00	282,162.43	490,168.56	
Michigan		1,620	1,620	640	26,284.64	838,799.20	366,024.00	
Minnesota		1,620	1,620	640	9,785.00	315,528.31	447,747.46	34,966.00
Mississippi		1,620	1,620	640	26,033.94	518,987.00	486,234.00	49,910.00
Missouri	1,686.98			640	775.25	386,400.00	342,586.00	188,665.14
Montana	32,217.74	1,260		640	5,800.00	254,016.00	278,532.00	3,975.00
Nebraska	49,781.81	1,620		640	6,394.63	316,388.10	280,000.00	
Nevada	11,955.08		1,200	640		81,008.49	56,635.00	
New Hampshire	1,134.54	1,620		640	5,778.97	143,106.74	105,288.42	
New Jersey	8,153.60	1,620		640		316,001.00	362,231.34	
New Mexico				640	21,150.00	381,216.61	115,000.00	6,000.00
New York		1,620	1,620	640	13,010.00	1,398,354.00	1,455,766.00	221,600.00



North Carolina	1,620		640	400.00	1,415,546.00	857,400.00	
North Dakota	1,620		640	9,111.00	132,707.56	274,290.00	5,000.00
Ohio	1,620		640	4,000.00	415,194.00	430,876.29	7,200.00
Oklahoma		1,620	640	26,939.16	720,895.00	213,200.00	
Oregon	1,620		640	10,190.00	862,450.90	329,380.64	
Pennsylvania	1,620		640	6,664.00	748,612.80	260,000.00	
Rhode Island			640	1,532.71	62,650.00	15,175.00	3,664.00
South Carolina	1,620	1,620	640	8,870.00	602,250.00	85,000.63	9,200.00
South Dakota		1,620	640	4,441.66	265,600.00	165,415.38	6,350.00
Tennessee	1,620		640	9,046.34	552,075.00	325,302.00	3,130.00
Texas	1,620		640	9,960.00	747,335.00	1,225,841.26	4,410.00
Utah	1,260		640	12,965.00	200,000.00	91,021.00	
Vermont	1,300		640	2,000.00	120,000.00	73,180.00	
Virginia	1,620	1,620	640	5,963.50	1,020,377.00	308,410.00	
Washington	1,620		640	8,230.60	648,706.06	367,855.16	
West Virginia		1,620	640	3,990.00	330,450.00	139,000.00	4,500.00
Wisconsin	1,620	1,620	640	17,827.00	384,457.00	638,422.83	
Wyoming	1,260		640	3,335.00	240,105.44	115,171.00	
Alaska			640		57,500.00		
Hawaii			640	13,439.50	350,153.91		
Puerto Rico	1,620		640	29,750.00	405,064.81		
Unallotted			410	61,699.25			
Grand total	56,560	31,620	33,050	528,000.00	24,941,187.71	16,534,464.75	2,333,138.51

<sup>1</sup> Preliminary distribution.  
<sup>2</sup> Excludes Regional Contract Section 205.

TABLE 7.—Number of technical cooperative extension workers added by 48 States and Hawaii during fiscal years July 1, 1945, to June 30, 1950.<sup>1</sup>  
 (This represents the net additions during the first 5 years that Bankhead-Flannagan funds were available, according to the records of the Washington, D. C., office.)

State or Territory	County agents (white)	Assistant county agents (white)	Negro county agents	County home- demon- stration agents (white)	Assistant county home- demon- stration agents (white)	Negro county home- demon- stration agents	County 4-H Club agents		Assistant county 4-H Club agents	Supervisors		Subject- matter special- ists	Total added
							White	Negro		White	Negro		
EASTERN REGION													
Connecticut		3			4	1	1	1		1	3	5	16
Delaware		2			1							6	11
Maine	—2	2			3			6			—1	1	9
Maryland		11	4	—3	12	2					3	44	73
Massachusetts		9		1	8			1	—1		—1	9	26
New Hampshire		5			—1							—2	1
New Jersey		4		2	—1			5	1	2		6	19
New York		40		6	20			7	28	2	2	39	142
Pennsylvania	1	25		2	9					2		13	52
Rhode Island					1				1			5	7
Vermont		—1		2				1		—1		—	1
West Virginia	3	5	1	5		4		12		—1	1	—12	22
Region total	2	105	5	15	56	7		33	30	7	1	114	379
SOUTHERN REGION													
Alabama		44	—1	—1	20	2					—1	—6	59
Arkansas	3	45	12		6	9						8	85
Florida	1	27	2	8	5	1						6	50
Georgia	19	34	14	16	21	4				4		14	126
Kentucky	7	30		27	—5	4				4		12	79
Louisiana		47	3		15	11				3		7	86
Mississippi		10	14	5	16	17				3	2	13	80
North Carolina		94	12	4	45	29				8	4	15	211
Oklahoma	3	57	3	1	23	5				2		10	104
South Carolina		40	14	2	17	14				2	1	11	101
Tennessee	1	47	2	18	25	3						14	110
Texas	14	70	5	—17	30	3				5		25	135
Virginia	2	22	5	10	15	19				2		23	98
Region total	50	567	85	73	233	121				32	11	152	1,324



NORTH CENTRAL REGION									
Illinois	4	19	28	57		14	3	10	135
Indiana	35	19	3	34			-2	12	101
Iowa	12	7	29	89			7	5	156
Kansas	8	28	26	28		14	1	4	123
Michigan	18	25	3	26		2	2	26	104
Minnesota	5	22	3	29		11	1		71
Missouri	88	19	10		3		6	13	149
Nebraska	17	16					2	1	46
North Dakota	9	10	1				3	2	32
Ohio	45	18	-1	-2			5	-5	65
South Dakota	4	11	-1	-2		-1	5	8	38
Wisconsin	26	16		35			4	16	103
Region total	271	210	101	294	3	40	37	92	1,123
WESTERN REGION									
Arizona	5		2				2	1	11
California	90	11	30				7	7	151
Colorado	2	9	2	17			2	5	42
Idaho	2	12	3	9			3	6	46
Montana	7	7	5				3	12	44
Nevada	4	2					1		6
New Mexico	24	4	10				4	9	54
Oregon	16	10	2	8		5	6	15	64
Utah	3	11						7	27
Washington	34	11	4				6	5	65
Wyoming	8	9	1					11	32
Hawaii	8		9	-1			5	4	26
Region total	203	86	68	33		5	39	82	568
Grand total	1,146	384	458	360	4	75	115	440	3,394

1 Alaska and Puerto Rico are not included, as they were not included in the Bankhead-Flannagan Act.  
2 Includes part-time agents.

